



PARTNERSHIP

KEY TO SUCCESS & SUSTAINABILITY

A Development Sector Experience

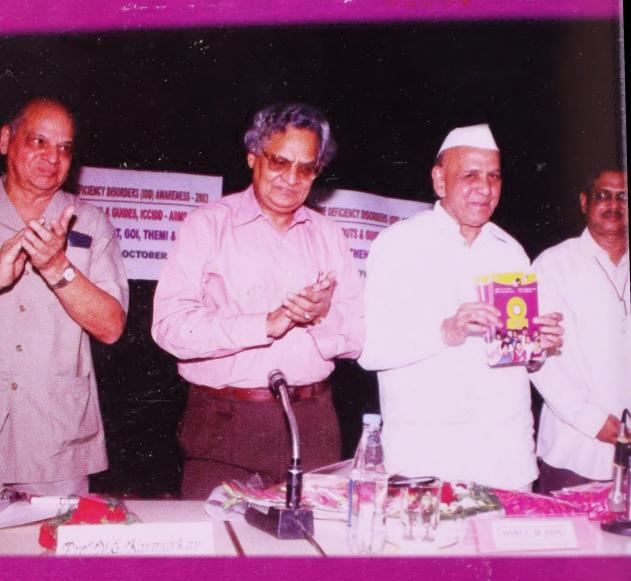
Bharat Scouts & Guides and ICCIDD











Mr. Mohan Dharia,

Community Health Cell

Library and Information Centre # 367, "Srinivasa Nilaya" Jakkasandra 1st Main, 1st Block, Koramangala, BANGALORE - 560 034.

Phone: 553 15 18 / 552 53 72 e-mail: chc@sochara.org

outy Chairman, ner Union Ministe on IDD' tion held ıides, New Delhi. ron of ICCIDD

> Mr. L. M. Jain, ant Panday)

PARTNERSHIP

KEY TO SUCCESS & SUSTAINABILITY

A Development Sector Experience

Bharat Scouts & Guides and ICCIDD

Published in India by ICCIDD Secretariat

Room No. 28, Old O.T. Block,

Centre for Community Medicine,

All India Institute of Medical Sciences,

New Delhi – 110029

Copyright © 2004 ICCIDD

All rights reserved.

Cover design by Pathfinders

Typesetting & printed by Pathfinders



DIS-337

Table of Contents

No.	Topic Page No
1.	Editorial Team ii
2.	Introduction
3.	Acknowledgements
4.	Abbreviations
5.	Message from viii Prof. M. G. Karmarkar, President ICCIDD & Prof. C. S. Pandav, Secretary, ICCIDD
6.	Message from Mr. L. M. Jain, National Commissioner Bharat Scouts and Guides
7.	Text of Sh. A. P. J. Abdul Kalam's speech xi on assuming Office of President of India
8.	Extract from the Prime Minister's xvi Independence Day Speech on 15th August 2001
9.	Reflections
9.1	Mr. D. L. Sharma, Director xvii
	Bharat Scouts and Guides
9.2	Dr. K. Sukumara, Joint Director (Scouts), xviii
	Bharat Scouts and Guides
10.	BSG and ICCIDD logos xix
Chapter 1	International Council for Control of Iodine Deficiency Disorders and Indian Coalition for Control of Iodine Deficiency Disorders (ICCIDD) – An Introduction

Chapter II	Scouts and Guides Movement – A Historic Overview An Introduction – The Purpose and Principles of Scouting	10
Chapter III	Iodine Deficiency and Iodised Salt - Some Basic Facts	25
Chapter IV	20 Questions on Iodine Deficiency Disorders (IDD)	39
Chapter V	Some Basic Facts about Salt Iodisation and Production	50
Chapter VI	Role Of Salt Department In Elimination Of IDD In India By Shri S. Sundaresan, Salt Commissioner, Government of India	61
Chapter VII	National Iodine Deficiency Disorders Control Programme (NIDDCP)	71
Chapter VII	IProgress Towards the Elimination of Iodine Deficiency Disorders	76
Chapter IX	Partnership of ICCIDD with BSG and other NGOs	79
Chapter X	ICCIDD Collaboration with Scouts and Guides of Kenya, Nepal and Thailand	108
Chapter XI	Coverage of Events in Bharat Scouts and Guides Newsletter	111
	Facsimile of "IQ+ Jagriti" Newsletter	114
	Time Table and Name Sticker distributed through BSG	115
	Trishna	116
Annexures		117

Editorial Team

Aparajita Singh
Reema Sujith
Suraksha Shukla
Rijuta Pandav
Saroja Narayanan
Prof. Sunaina Kumar
Denish Moorthy
Peter Parekattil

ICCIDD Secretariat,
Room No. 28, Old O. T. Block,
Center for Community Medicine,
All India Institute of Medical Sciences,
New Delhi-110029

Ph.: 011-26588522 E-mail: cpandav@iqplusin.org

Introduction

Partnerships enrich and strengthen programmes and enlarge the reach in implementation. This is specially relevant in situations where stakes are high and resources are limited. It has particular importance in the context of activities in the social and development sector. A public health programme, such as elimination of iodine deficiency disorders which has pointed significance to the health and development of the nation's population, is one such example.

The coming together of various stakeholders, and able leadership both at policymaking and professional level, has proved effective and successful with respect to National Iodine Deficiency Disorders Control Programme in India. If sustainability is a tool to measure the success of a programme, collaboration contributes eminently towards it. The intersectoral approach to address the public health problem of IDD is a pointer to this. It is in this context that we bring out this report to share the experiences and success of a partnership programme which is showing results in a short span of time.

ICCIDD is planning to span out and enlarge the scope of this partnership with other groups interested in the physical, mental and social well-being of the people. Consumer groups and Panchayati Raj Institutions provide opportunities for partnership.

All those behind this venture of bringing out this report wish that this instills inspiration to those involved and working for the betterment of the society.

15th March, 2004 (World Consumer Day)

Prof. M.G. Karmarkar Prof. Chandrakant, S. Panday

Acknowledgements

ICCIDD wishes to acknowledge with thanks and appreciation the tremendous contribution and cooperation of various individuals and organizations in its efforts to contribute towards National Iodine Deficiency Control Programme (NIDDCP). We place on record the support rendered by the Ministry of Health and Family Welfare, Department of Women and Child Development, Ministry of Human Resource Development, Office of the Salt Commissioner, Ministry of Industry, Government of India, Centre for Community Medicine – The All India Institute of Medical Sciences (CCM–AIIMS), the Bharat Scouts and Guides, Network of Professionals, UNICEF, the WHO and the Micronutrient Initiative (MI).

We thank all those who helped in bringing out this report. Space constraint prohibits us from giving the names of all those involved in this project. We acknowledge the efforts of the team members and officials of the Bharat Scouts and Guides (BSG) and Indian Coalition for Control of Iodine Deficiency Disorders (ICCIDD).

The Editorial Team is grateful to Prof. M. G. Karmarkar and Prof. C. S. Pandav for encouragement and guidance which made this report possible.

15th March, 2004 (World Consumer Day) The Editorial Team

Abbreviations

AIIMS - All India Institute of Medical Sciences

ALT - Assistant Leader Trainer

BSG - Bharat Scouts & Guides

CCM - Centre for Community Medicine

DGHS - Director General of Health Services

DWCD - Department of Women & Child Development

FAQ - Frequently Asked Questions

ICCIDD - Indian Coalition for Control of

Iodine Deficiency Disorders /

International Council for Control of

Iodine Deficiency Disorders

ICMR - Indian Council of Medical Research

IDD - Iodine Deficiency Disorders

IDDE - Iodine Deficiency Disorders Elimination

IEC - Information, Education & Communication

IQ+ - Intelligent Quotient, Iodine Quota

M.P. - Madhya Pradesh

mg - milligram

μg – microgram

MI - The Micronutrient Initiative

MIS - Management Information System

NaCl - Sodium Chloride

NAI - National Adventure Institute

NFHS-2 - National Family Health Survey - 2

NGCP - National Goitre Control Programme

NGO - Non-Government Organisation

NIDDCP - National Iodine Deficiency Disorders

Control Programme

PFA Act - Prevention of Food Adulteration Act

PPM - parts per million

RCH - Reproductive and Child Health

SAARC - South Asia Association for Regional Cooperation

STK - Spot Testing Kit (for iodine in salt)

TSH - Thyroid Stimulating Hormone

T-4 - Thyroxine

UN - United Nations

UNICEF - United Nations Children's Fund

VHAI - Voluntary Health Association of India

WHO - World Health Organisation

WOM - Word of Mouth



Message

Partnership and Collaboration are two key factors that contribute to the success of any developmental programme. Sustainable elimination of Iodine Deficiency Disorders (IDD) is one such programme that has been accorded high priority by the Government of India.

The non-governmental organization of International Council for Control of Iodine Deficiency Disorders (ICCIDD) has been associated with this programme since its inception. The mandate of ICCIDD exclusively commits it to sustainable elimination of this age-old scourge. ICCIDD staunchly promotes collaborations and partnerships in all its programmes with measurable levels of success. One such is the partnership programme with Bharat Scouts and Guides (BSG)— the largest non-governmental organization with global presence.

The partnership programme of BSG and ICCIDD dates back to 1997. This is a quotable example of 'Partnership: Key to Success and Sustainability'. Therefore, it was felt that this experience should be shared with all the interested groups and stakeholders in such a programme. Thus, this report is brought out for wider communication in order to promote inter-agency collaborations and networking. It is hoped that this experience will help other similarly placed groups working for the welfare of the people, in expanding the spectrum of partnership and collaboration.



ICCIDD Secretariat Room No. 28 Old O. T. Block, CCM Building.
All India Institute of Medical Sciences, New Delhi-110029
Telefax, 91-11-26588522, E-mail, cpandav@igplusin.org

आयोडीन युक्त नमक प्रतिदिन। नुद्धि और स्वास्थ सुरक्षित हरदिन।।





Consumption of adequately iodized salt by all is the best means to prevent and control IDD. Collaborative working will give a definite boost to such a programme of national importance and ensure its sustainability. Strong partnerships between salt producers, governments, scientific groups and civil society organisations at the national level will be the key to ensuring that salt iodisation is sustained and that iodized salt is available, acceptable and affordable to everyone who needs it. Consumer demand has been underappreciated, but it is a critical component of Universal Salt Iodisation (USI).

Prof. M. G. Karmarkar

President, ICCIDD

Former Prof. and Head, Department of Laboratory Medicine
The All India Institute of Medical Sciences, New Delhi

Prof. Chandrakant S. Pandav

mandar

Secretary, ICCIDD

Regional Coordinator - ICCIDD, (South Asia Region)

Professor, Centre for Community Medicine

The All India Institute of Medical Sciences, New Delhi



ICCIDD Secretariat, Room No. 28, Old O. T. Block, CCM Building.
All India Institute of Medical Sciences, New Delhi-110029
Telefax 91-11 26588522 E-mail cpandav@iqplusin.org

आयोडीन युक्त नमक प्रतिदिन। बुद्धि और स्वास्थ सुरक्षित हरदिन।।



THE BHARAT SCOUTS & GUIDES

National Headquarters

Phone: 23370724, 23378667, Fax: 91-11-23370126

Gram: Fleurdelis, New Delhi-110002

E-mail: tbsqnet@del2.vsnl.net.in, Homepage: bharatscoutsguides.org

: H.E. SHRI BHAIRON SINGH SHEKHAWAT, VICE PRESIDENT OF INDIA

: SHRI SHARAD PAWAR, M.P., FORMER DEFENCE MINISTER, Govt. of India

: L.M. JAIN IAS (Retd.) **National Commissioner**

Ref. No./B.S.G./N.H.Q./

Dated:

MFSSAGE

I was very happy to attend programmes for Elimination of Iodine Deficiency Disorders held at the National Headquarters of the Bharat Scouts & Guides, New Delhi on October 7th and 20th October, 2003.

I am glad to note that the efforts which are being made by the ICCIDD Organisation to consume lodised Salt all over the country which are commendable in the direction of growth of healthy and happy citizens.

The Bharat Scouts & Guides will always be ready to contribute by alloting a session in all the important camps and events on this subject and I am sure with the help of literature, slide presentation and expertise of their functionaries provided by ICCIDD, the Bharat Scouts & Guides will be able to contribute a lot to bring the desired awareness at the grass root level.

I wish the programme all success.

(L.M. JAIN)

National Commissioner

LAKSHMI MAZUMDAR BHAWAN, 16, M.G. MARG, I.P. ESTATE, Post Box No. 7043, NEW DELMI-110002 (INDIA)



Dr. A. P. J. Abdul Kalam's speech on assumption of office as President of the Republic of India

The President, Dr. A.P.J. Abdul Kalam has called upon the countrymen to pay focused attention towards realizing the vision of transforming India into a 'Developed Nation'. In his speech on assumption of office as President of India at the Central Hall of the Parliament in New Delhi, Dr. Kalam said, "Now we need a movement in the country. This is the time to ignite the minds of the people for this movement. We will work for it. We cannot emerge as a developed nation if we do not learn to transact with speed. I realize, small aim is a crime. I will work and sweat for a great vision, the vision of transforming India into a developed nation."

Following is the full text of the speech of the President Dr. Kalam on the occasion (25 July, 2002):

"Respected Shri Narayananji, Mr. Vice President, Mr. Prime Minister, Mr. Deputy Prime Minister, Chief Justice of India, Speaker of Lok Sabha, Members of the Union Council of Ministers, Governors, Chief Ministers, Deputy Chairperson of Rajya Sabha, Deputy Speaker of Lok Sabha, Members of Parliament, Excellencies, friends and children – my greetings to all of you. When I see in front of me, the distinguished dignitaries including a number of senior diplomats representing their countries and other eminent personalities, a beautiful Thiagarajaswamigal's Keerthana in Sri Raga echoes from my heart – "Endaro Mahaanubhavalu andhariggi vandanamulu" which means, "I salute all the great noble hearted human beings".

I thank the Members of Parliament and State Legislatures for having elected me. The endorsement I have received from the nation, giving me the responsibility to realize our shared dream of India with prosperity, harmony and strength is really overwhelming. Ten illustrious personages have adorned this office of the President and contributed to the nation building with their outstanding personal qualities. I salute them all. While I assume the office of the President of Republic of India with humility and gratefully recognizing the immense trust, the people of the country and the political system have reposed in me, I promise to endeavour to fulfill the aspirations of our people.

Indian civilizational heritage is built on universal spirit. India always stood for friendship and extends warm hands to the whole world.

We have made significant achievements in the last fifty years in food production, health sector, higher education, media and mass communication, industrial infrastructure, information technology, science and technology and defence. Our nation is endowed with natural resources, vibrant people and traditional value system. In spite of these resources, a number of our people are below the poverty line, undernourished and lack primary education itself. Our aim is to empower them to be poverty free, healthy and literate. A country needs to have the characteristics as defined in Thirukkural, composed over 2000 years ago:

'Pini inmai Selvam Vilaivinbam Emam Aniyenba Nattirkiv vainthu'

That is, "The important elements that constitute a nation are: being disease free; wealth; high productivity; harmonious living and strong defence". All our efforts should be focused towards building these five elements at various levels in a coherent and in an integrated manner. I am convinced that our nation with a strong, vibrant and billion plus population can contribute to realize these elements.



Today our country is facing challenges such as cross-border terrorism, certain internal conflicts and unemployment. To face these challenges, there must be a vision to ensure focused action of one billion citizens of this great country with varied capabilities. What can be that vision? It can be none other than transforming India into a 'Developed Nation'. Can government alone achieve this Vision? Now we need a movement in the country. This is the time to ignite the minds of the people for this movement. We will work for it. We cannot emerge as a developed nation if we do not learn to transact with speed. I recall the saintly poet Kabir's wisdom to us:

'Kal Kare So Aaj Kar, Aaj Kare So Ab'

That means, "What you want to do tomorrow do it today, and what you want to do today do it now". This vision of a developed nation needs to be achieved with Parliamentary Democracy, which is the core of our governance system. The basic structure of our Constitution has stood the test of time. I am confident that it will continue to be responsive to the demands of changing situations. The first and foremost task is to respect and uphold the constitutional processes. in the best interest of our people and our nation, without fear or favor and with fairness and firmness. India is a Union of States based on the framework of cooperative federalism. Within the cooperative framework, there is also a requirement to develop competitive strengths for the states so that they can excel at the national level and the global level. Competitiveness helps in ensuring and managerial efficiency and to be creative to meet new challenges. These are essential to survive and prosper in a fast changing world of today. In addition, in order to strengthen democratic processes and institution, we all truly strive for substantive decentralization.

I wish to emphasize my unflinching commitment to the principle of secularism, which is the corner stone of our nationhood and which is the key feature of our civilization strength. During the last one year I met a number of spiritual leaders of all religions. They all echoed one message, that is, unity of minds and hearts of our people will happen and we will see the golden age of our country, very soon. I would like to endeavor to work for bringing about unity of minds among the divergent traditions of our country.

Along with speedy development aimed at elimination of poverty and un-employment, national security has to be recognized by every Indian as a national priority. Indeed, making India strong and self reliant – economically, socially and militarily – is our foremost duty to our motherland and to ourselves and to our future generations.

When the child is empowered by the parents, at various phases of growth, the child transforms into a responsible citizen. When the teacher is empowered with knowledge and experience, good young human beings with value systems take shape. When individual or a team is empowered with technology, transformation to higher potential for achievement is assured. When the leader of any institution empowers his or her people, leaders are born who can change the nation in multiple areas. When the women are empowered, society with stability gets assured When the political leaders of the nation empower the people through visionary policies. the prosperity of the nation is certain. The medium for transformation to developed India is the empowerment at various levels with power of knowledge. A roadmap for realizing this vision of developed India is in front of us. At this juncture, I recall a beautiful thought of Dr. G. G. Swell. an eminent leader from North East: "We must have a mental infrastructure. Mental infrastructure means sincerity of purpose, of vision, of purity of heart and mind".

When I travel across our nation, when I hear the sound of waves of the three seas around the shores of my country, when I experience the breeze of wind from the mighty Himalayas, when I see the bio-diversity of North-East and our islands and when I feel the warmth from the western



desert, I hear the voice of the youth "When can I sing the song of India?" What can be the answer? I have so far interacted with over 50, 000 school children during the past one year. I would like to share with you my answer to the urge of these children. If youth have to sing the song of India. India should become a developed country which is free from poverty, illiteracy and unemployment and is buoyant with economic prosperity, national security and internal harmony. To create this transformation we all have to resolve ourselves to work and sweat for the national development. I would like to share the song of youth, which I normally recite with the school children, here at this juncture. I am very happy to see the children present here representing the future generation. Through them I would like to convey the song of youth to all children of our country and the people.

As a young citizen of India, armed with technology, knowledge and love for my nation,

I realize, small aim is a crime.

I will work and sweat for a great vision, the vision of transforming India into a developed nation, powered by economic strength with value system.

I am one of the citizens of the billion;

Only the vision will ignite the billion souls.

It has entered into me;

The ignited soul compared to any resource is the most powerful resource on the earth, above the earth and under the earth.

"We aspire to make India a knowledge superpower by the year 2010"

- Hon' ble Prime Minister Atal Bihari Vajpayee Quoted in the Sunday Times of India January 7, 2001, New Delhi



From the Prime Minister's Independence Day speech on 15th August, 2001

"Children are the most precious wealth of our nation. Ten years ago, representing India in the World Conference for Children, I had argued for greater investment for all-round development of children. However, the agencies of the Government alone cannot achieve this. I earnestly appeal to all voluntary organizations, businesses, and common citizens to ensure that we together enable every child in India to develop to their fullest potential".

-Shri Atal Bihari Vajpayee



THE BHARAT SCOUTS & GUIDES

National Headquarters

Phone 23370724 23378667. Fax 91-11-23370126
Gram Fleurdelis, New Delhi-110002
E-mail tbsgnet@del2 vsnl.net in, Home Page bharatscoutsguides org

Patron : H.E. SHRI BHAIRON SINGH SHEKHAWAT VICE PRESIDENT OF INDIA
President : SHRI SHARAD PAWAR, M.P., FORMER DEFENCE MINISTER, Govt. of India

National Commissioner : SHRI L. M. JAIN, IAS (Retd.)

Ref No./B.S.G./N.H.Q./

Dated .

Partnership Programs of Bharat Scouts & Guides

D.L.Sharma
Director
Bharat Scouts & Guides

The Bharat Scouts and Guides have undertaken a number of programs of public interest and social well-being in partnership with various organizations. The latest in this series is the one in collaboration with ICCIDD & AlIMS for advocacy of consumption of iodized salt to prevent iodine deficiency disorders (IDD). Under this, officials of ICCIDD visited various camps and training programmes organized by the BSG. They conducted interactive sessions and distributed educational material. These efforts are taking roots by carrying the message to the masses at the grassroots level.

Another ongoing program of Bharat Scouts and Guides is the one with The Leprosy Mission Trust (India) for eradication of leprosy. In this program the top officials of Leprosy Mission visit various Scouts and Guide camps in the country and conduct programmes to create awareness of leprosy and carry the message to the people through the medium of Scouts and Guides. Dastak project is carried out all over the country – it means the Scouts and Guides will knock at the door of each family and make survey of leprosy patients and take them to the nearest hospital for treatment

Besides this, our States are organizing a number of community development programmes like service in polio camps, water supply on the railway platforms, cleanliness camps in the slum areas, peace marches, rallies on "No-tobacco day", AID awareness campaigns, communal harmony etc..

(D.L.SHARMA)

LAKSHMI MAZUMDAR BHAWAN 16 M G MARG IP ESTATE POST BOX NO 7043 NEW DELHI - 110002 (INDIA)



THE BHARAT SCOUTS & GUIDES

National Headquarters

23370724. 23378667. Fax 91-11-23370126 Gram . Fleurdelis, New Delhi-110002

E-mail: tbsgnet@del2 vsnl net in, Home Page | bharatscoutsguides org

VICE PRESIDENT OF INDIA H E. SHRI BHAIRON SINGH SHEKHAWAT Patron : SHRI SHARAD PAWAR, M.P., FORMER DEFENCE MINISTER, GovL of India President

National Commissioner : SHRI L. M. JAIN, IAS (Retd.)

Ref. No./B.S.G./N.H.Q./

Dated

The Success and Impact of Training of Scouters & Guiders by ICCIDD

Dr. K.Sukumara Joint Director (Scouts) Bharat Scouts & Guides

A one-day training was held at National Headquarters of Bharat Scouts & Guides on 7th October 2003 for Scouters and Guiders of Local State Bharat Scouts & Guides. This training was given by the representatives of ICCIDD on the subject of Iodine Deficiency Disorders. The participants were highly motivated by the input sessions led by very prominent resource persons of ICCIDD and AIIMS. The participants went back to the Units and through their Scouts and Guides implemented the programme and brought the results of tests conducted on 20th October 2003 at the National Headquarters. It was a very successful programme.

In this regard, I had discussions with some of the participants. I understand that they have very much appreciated this program. They feel that a large number of people of the country do not know the facts of iodine deficiency disorders and also the need of daily consumption of adequately iodised salt for physical and mental well-being. Hence, they strongly recommend that this program should be carried on all over the country. The Scouts & Guides are the best media to take this concept to the grassroots level.

I am sure that ICCIDD will consider this recommendation of the participants and take initiative to organize similar programs in all other regions during the year 2004. We, the Bharat Scouts and Guides extend our all support for the success of this program.

(K.SUKUMARA)

10/3/04

LAKSHMI MAZUMDAR BHAWAN, 16 M G MARG I P ESTATE POST BOX NO 7043 NEW DELHI - 110002 (INDIA)





Bharat Scouts & Guides Logo

- 1. The Arrow- denotes straightforwardness
- 2. The Asoka Chakra- taken from the National Emblem of India- the 24 spokes symbolize alertness to serve 24 hours a day
- 3. The Flower- signifies the Guides' symbol of spreading fragrance while serving
- 4. The String- indicates universal fraternity
- 5. The Three Petals of Lily flower- symbol of purity



ICCIDD Logo

Iodine is an essential element for the development of brain and body. Fully developed brain and body contribute to mental and physical well-being. The International Council for Control of Iodine Deficiency Disorders (ICCIDD) logo symbolizes this scientific truth.



The International Council for Control of Iodine Deficiency Disorders

Introduction

The International Council for Control of Iodine Deficiency Disorders (ICCIDD) is the only international organization specifically constituted to promote the elimination of Iodine Deficiency Disorders (IDD). ICCIDD's multidisciplinary global network of experts consists of some 700 specialists from more than 100 countries. They include scientists in the medical and nutrition fields, public health administrators, development managers, technologists, communicators, economists, salt technologists and other industry experts. All of them are committed to assisting governments and international agencies in developing national programmes for the virtual elimination of IDD as a public health problem.

ICCIDD was formed in 1986 with support from UNICEF, WHO and the Australian Government in order to bridge the gap between available knowledge and its application in solving the problem of IDD for the millions at risk. ICCIDD has played a major role in communicating the IDD threat to decision makers of national governments and international agencies and to a variety of health professionals and planners.

By participating in public policy development and advocacy, programme development, implementation and training, ICCIDD consultants assist countries with significant IDD problems to develop national IDD control programmes in cooperation with national governments, institutions and individuals, private industries, welfare agencies, major international agencies and key bilateral aid giving agencies.

ICCIDD was recognized as the expert group by the UN system in 1987 and further as a Technical Expert Group by the World Health Assembly in 1993. ICCIDD is a non-profit, non-governmental organization (NGO) with official consultant status with WHO and the UN system and official participant in the annual World Health Assembly.

The 5 'C's of ICCIDD

- 1. Commitment
- 2. Credibility
- 3. Continuity
- 4. Collaboration
- 5. Cohesion

ICCIDD Mandate

- To promote awareness of the magnitude of IDD and the fact that it can be eliminated at an affordable cost
- To provide technical assistance in the assessment of prevalence in countries and the development of strategies for IDD elimination
- To support training programmes at national and regional levels for survey design, programme management, monitoring and evaluation, social communication and technical assistance to quality assurance systems.
- To encourage research on issues relating to sustainable elimination of IDD as a public health problem.

ICCIDD Structure

- The ICCIDD has a Governing Board with more than half of the members from developing countries and the international agencies. The Board meets annually, usually in conjunction with a regional meeting or a special workshop.
- ICCIDD has the Executive Committee of eight members which includes Chairman, Vice-Chairman, Executive Director, Secretary, Treasurer and three other members.

Executive Committee

- 1. Prof. J. Ling (Chair)
- 2. Dr. G. N. Burrow (Vice Chair)
- 3. Dr. John T Dunn (Executive Director)
- 4. Dr. P. L. Jooste (Secretary)
- 5. Dr. P. Walker (Treasurer)
- 6. Mr. M. G. Venkatesh Mannar (Member)
- 7. Ms. J. Mutamba (Member)
- 8. Dr. S. Sinawat (Member)

The Executive Director's position is full-time and that of the others part-time. The Executive Director is responsible for the global secretariat in Virginia, USA which is equipped with a small and committed staff.

Regional Coordinators

The ICCIDD has Regional Co-coordinators for Africa, Americas, Asia Pacific, China, Far East, and Middle East, South Asia, East Europe / Central Asia, West Central Europe. Each Regional and Sub-Regional Coordinator is the member of the Board who makes annual report on IDD activities in the region and also takes appropriate initiatives including consultancies to individual countries. In Africa, three

Sub Regional Co-ordinators are responsible for countries in the north and west (both Anglophone and Francophone), for Central (Francophone) and East and South (Anglophone) areas. The names of Regional Coordinators are given below:

No.	Region	Regional Coordinator	
1.	Africa	Dr. D. Lantum	
		Central Africa and Madagascar Sub-region	
		Dr. J. Egbuta	
		West Africa Sub-region (Anglophone)	
		Ms. J. Mutamba	
		South/East Sub-region	
		Dr. T. Ntambwe	
		West Sub-region (Francophone)	
2.	Americas	Dr. E. Pretell	
3.	Central American	Dr. E. Boy	
	/Caribbean		
	Sub-region		
4.	Asia Pacific	Dr. C. Eastman	
5.	China-Far East	Dr. Zu-Pei Chen	
6.	East Europe/	Dr. G. Gerasimov	
	Central Asia		
7.	Middle East	Dr. F. Azizi	
8.	South Asia	Dr. C.S. Pandav	
9.	West/	Dr. A. Pinchera	
	Central Europe	Dr. M. Zimmermann	

ICCIDD Board of Directors

Executive Committee

- · Prof. J. Ling (Chair)
- . Dr. G. N. Burrow (Vice Chair)
- Dr. J. T. Dunn (Executive Director)
- Dr. P. L. Jooste (Secretary)
- Dr. P. Walker (Treasurer)
- · Mr. M. G. Venkatesh Mannar
- · Ms. J. Mutamba
- · Dr. S. Sinawat

Chairman Emeritus

· Dr. B. S. Hetzel

Committee Chairs

- Dr. H. Burgi (Science/Technology)
- Dr. G. N. Burrow (Development)
 (also Vice Chair)
- · Mr. R. Hanneman (Salt)
- Mr. D. Haxton (Liaison)
- Prof. J. Ling (Communication)
 (also Chair)

Regional Coordinators

Africa

- Dr. D. Lantum (RC)
- Dr. J. Egbuta (West Africa Subregion (Anglophone))
- Ms. J. Mutamba (South/East Sub-region)
- Dr. T. Ntambwe (West Subregion, Francophone)

Americas

- Dr. E. Pretell (RC)
- Dr. E. Boy (Central American/ Caribbean Sub-region)

Asia Pacific

· Dr. C. Eastma

China-Far East

• Dr. Zu-Pei Chen (RC)

East Europe/ Central Asia

· Dr. G. Gerasimov

Middle East

• Dr. F. Azizi (RC)

South East Asia

• Dr. C. S. Pandav (RC)

West/Central Europe

• Dr. A. Pinchera (RC)

Other Board Members

- . Mrs. M. N. Asuquo
- · Dr. F. Delange
- . Dr. G. R. DeLong
- Mr. Zhihua Dong
- · Dr. C. Eastman
- . Ms. A. M. Higa
- · Dr. Izzeldin S. Hussein
- Dr. L. Ivanova
- Dr. L. Locatelli-Rossi

- · Dr. G. Maberly
- · Mr. B. Moinier
- . Dr. C. S. Pittman
- · Mr. E. Sigurdsson
- · Mr. S. Sundaresan
- . Dr. C. Thilly
- · Dr. C. Todd
- · Dr. Yan Yuquin
- · Dr. M. Zimmermann

The Indian Coalition for Control of Iodine Deficiency Disorders

Introduction

Indian Coalition for Control of Iodine Deficiency Disorders (ICCIDD) is the national chapter of the international apex body of International Council for Control of Iodine Deficiency Disorders (ICCIDD).

ICCIDD Milestones

1.	Iodine, Thyroxine & Brain Development - Meeting at AIIMS New Delhi, India	1985
2.	WHO/UNICEF Intercountry Workshop on IDD held at WHO-SEARO, New Delhi	1985
3.	Proposal to form ICCIDD	1985
4.	ICCIDD formally established in Kathmandu with UNICEF/AIADAB support	1986
5.	Recognition as the expert group by the UN system ACC/SCN	1987
6.	Recognised by WHO as a Technical Expert Group	1993
7.	Indian Chapter of ICCIDD is formed	1995
8.	The Indian Chapter is registered as a Society under Societies Registration Act	1997
9.	The Indian Chapter receives FCRA Registration	2001
10.	Launch of IDD Newsletter 'IQ+ Jagriti' from New Delhi	2003

The Indian Coalition for Control of Iodine Deficiency Disorders (ICCIDD) got registered under the Societies Registration Act-1860 in May 1997, in New Delhi. The Indian Coalition

is a non-profitable, non-governmental organization. The group is committed to sustainable elimination of IDD in India. The legacy of the office bearers of the Coalition dates back to the mid-nineteen fifties having been directly associated with the legendary late Prof. V. Ramalingaswami, first National Research Professor and former Director General of Indian Council of Medical Research and Director of the All India Institute of Medical Sciences, New Delhi who pioneered IDD elimination programmes starting from nineteen fifties in the Kangra Valley (Himachal Pradesh).

Vision, Mission and Dedication of ICCIDD

Vision: The vision of ICCIDD is a world virtually free from iodine deficiency disorders with national endeavors to maintain optimal iodine nutrition primarily through consumption of iodized salt, which should be made easily available and affordable for all people for all times.

Mission: The mission of ICCIDD is to provide a focused advocacy to governments and development agencies, of a continued priority for iodine nutrition, providing technical expertise in a multidisciplinary approach.

Dedication: ICCIDD dedicates itself to programmes fully supported at the national level for permanent, sustained success and will work with all partners and national entities toward that end.

Executive Committee of Indian Coalition for Control of Iodine Deficiency Disorders

S.	Name and Address	Occupation	Designation
No.	Traine and Address		(in Society)
1.	Prof. Madhukar Ganesh Karmarkar 14, Gautam Apartments, Gautam Nagar, New Delhi – 110 049 Tel.: 26565429	Consultant	President .
2.	Dr. Chandrakant S. Pandav Room No. 28, Centre for Community Medicine AIIMS, New Delhi 110 029 Tel: 26588522 (O), 26492693 (R)	Professor (Community Medicine)	Secretary
3.	Dr. Narendra Kumar Arora Department of Paediatrics AIIMS, New Delhi 110 029 Tel: 26493485 (R)	Professor (Paediatrics)	Vice President
4.	Ms. Saroja Narayanan 967, Block 19, Lodi Colony, New Delhi 110 003 Tel: 24628126 (R)	Project Officer (Public Health Nurse)	Treasurer
5.	Dr. Ajay Sood Department of Endocrinology Room No. 304, AIIMS, New Delhi 110 029 Tel: 6894240 (R)	Physician Endocrinologist	Executive Member
6.	Dr. K. Anand Room No. 21, Centre for Community Medicine AIIMS, New Delhi 110 029 Tel: 6884821 Ext. 3553	Associate Professor (Community Medicine)	Executive Member
7.	Mr. M. D. Gujarati, 573, 1st Floor, Main Road, Chirag Dilli, New Delhi 110 017 Tel: 26858951	Chartered Accountant	Executive Member
8.	Dr. M. M. Godbole Department of Endocrinology SGPIMS, Rai Bareli Road, Lucknow Tel: 0522-440005	Professor Endocrinlogy	Member

Dr. Shreerang A. Godbole Physician Member 4 Sterling Centre 1st Floor. Endocrinologist Opp. Arora Towers, M.G. Road Pune 411 001 Tel: 0212-386739 10. Dr. Dipty Jain Paediatrician Member Department of Pediatrics (Associate Govt. Medical College Professor) Nagpur, Maharashtra Tel: 0212-1416570/1060 11. Dr. (Mrs.) Vikas K Desai Professor Member Prof & Head, Department of PSM (Community Govt. Medical College. Medicine) Majuragate, Surat 395 001 Tel: 0261-43485 12. Dr. R. Sankar **Physician** Member National Programme Officer South Asia Regional Office The Micronutrient Initiative 208, Jorbagh, New Delhi - 110 003 13. Dr. N. Prahlad Rao Consultant Member House No. 2-16-112 Prashanti Nagar Opp. Survey of India Uppal, Hyderabad Tel: 040-674713 14. Dr. F. U. Ahmed Director Member North-Eastern Indira Gandhi (Community Institute of Medical Sciences Medicine) Yhankheli, Opp. Law College Shillong - 793001, Meghalaya 15. Prof. S. K. Kapoor Professor Member Comprehensive Rural Health (Community Services Project, Ballabhgarh Medicine)

Strengths of ICCIDD

- · Legacy of Work in IDD since 1950s
- · Technical Expertise
- · Interdisciplinary Team

Haryana

Scouts and Guides Movement

"As a matter of fact I didn't actually start the Boy Scout Movement, because the blooming thing started itself unseen. It started in 1907 – but the microbe of Scouting had got me long before that."

Robert Stephenson Smyth Baden-Powell



A Historic Overview

Robert Stephenson Smyth Baden-Powell a British army officer started Scouting as training for his soldiers in 1907 which has today become the largest youth movement in the world. Scouting is a non-political, voluntary educational movement for young people, open to all who are prepared to accept and live the Scout Promise and Law. It is the largest youth movement in the world with an estimated 25 million members in over 154 countries. The purpose of Scouting is to contribute to the development of young people in achieving their full spiritual, intellectual, physical, social and cultural potential as individuals, as citizens and as members of their local, national and international communities. To a young person scouting is fun, games, camping, activities, the mountains, the sea, out of doors achievement, badges and being part of a group.

When Powell was a boy he got a lot of fun out of trapping rabbits in woods. In doing this he learned to creep silently, to know the way by landmarks, to note tracks and read their meaning. Somewhere in about 1893, he started teaching

scouting to young soldiers in his regiment. He wanted to make them feel that they were a match for any enemy, able to find their way by the stars or the map, accustomed to notice all tracks and signs and to read their meaning, and able to fend for themselves away from regimental cooks and barracks. In short, he wanted each man to be an efficient, all-round, reliable individual. The scheme worked. The men loved the training and scouting became very popular in the regiment. In 1899 he wrote a little book called 'Aids to Scouting' for soldiers. It taught them observation, or how to track, and it taught them deduction, or how to read the information given by tracks. Later he re-wrote 'Aids to Scouting', so that it would appeal to boys instead of to soldiers and make them into real men and good citizens.

In 1909, the first big rally was held at the Crystal Palace, London. More than 10,000 boys attended the rally. Baden–Powell was startled to discover that many girls also showed up at the rally, proclaiming themselves as 'Girl Scouts'! He had to think of a name, and soon he remembered that he had been particularly impressed with some "Guides" in India. These men had operated on the North–West Frontier and their main task was to go on very dangerous expeditions. Even when they were off duty, the Guides were still training their minds and bodies. With this in mind, Lord Baden–Powell decided that "Girl Guides" would be a good name for these pioneering young women.

A "Scheme For Girl Guides" was published in the Scout Headquarters Gazette and together with his sister Agnes, Lord Baden-Powell wrote the first Guide Handbook called "How Girls Can Help To Build Up The Empire". In 1910, the Girl Guides Association was formed with Agnes Baden-Powell as the first President.

Baden-Powell and Agnes had become friends with a woman from the United States, Juliette Magill Kinzie Gordon Low also known as Daisy, in 1910. Juliette Low was extremely

interested in the idea of a scouting organization for girls. She began a troop of Girl Guides in Scotland, which was a huge success, and later formed other troops in London. On March 12, 1912 she realized her dream of returning to the United States and organizing "Girl Scouts." Thus Juliette Magill Kinzie Gordon Low became the founder of girl scouting in the USA.

Historic Events at a Glance

1.	Baden Powell started teaching scouting to young soldiers in his regiment	1893
2.	Baden Powell wrote the book called "Aids to Scouting" for Soldiers	1899
3.	Baden Powell started Scouting as training for his soldiers, which has become the largest youth movement in the world today	1907
4.	The first Scout Troop in India was formed by a Scottish Missionary in the then Central Province (presently Madhya Pradesh), which was later disbanded in 1910	1908
5.	The first big Rally was held at the Crystal Palace, London in which more than 10,000 boys participated.	1909
6.	The common confirmed date for start of Scouting in India, when three troops of British Boys were started at Bangalore, Kirkee and Jabalpur.	1909
7.	The Girl Guides Association was formed with Agnes Baden-Powell as the first President	1910
8.	William D. Boyce incorporated the Boy Scouts of America.	1910
9.	The Girl Guide Movement started in Jabalpur, Madhya Pradesh	1911

10.	The Girl Scouts started in USA with the help of Juliette Magill Kinzie Gordon Low (also known as Daisy)	1912
11.	All India Girl Guide Association was formed	1916
12.	Montague (Secretary of State for India) and Chelmsford, (Viceroy of India) steps in to induct Indian boys to Scouts	1917
13.	Efforts to merge all the Boy Scouts Organisations with help of Lord Baden Powell with partial success	1921
14.	Fresh endeavours for merger of all Boy Scouts Organisations	1937
15.	Birth of Bharat Scouts and Guides by merger of Boy Scouts Association and Hindustan Scouts Association	
16.	Girl Guides Association merges with Bharat Scouts & Guides	1951

The Unknown Scout and a Good Turn

In 1909, the year of the first big rally, a Chicago businessman and publisher, William D. Boyce was lost in a thick London fog. A boy suddenly appeared and offered to lead him to his destination. When they arrived, Boyce tried to "tip" the boy for his trouble. The boy kindly refused and explained that he was a Scout and could take no money for a Good Turn. Boyce was intrigued and questioned the boy about Scouting. The boy led him to Baden-Powell's office, and then disappeared into the fog.

After speaking with Baden-Powell, Boyce was determined to begin an organization for boys in the United States of America. On February 8, 1910, Boyce incorporated the Boy Scouts of America. No one was able to discover the name of the Boy Scout whose Good Turn led scouting to the United States. A statue of a buffalo was erected in honor of the "Unknown Scout" at the Scout Training Centre at Gilwel Park, England. Thus, the ideals, methods, instruction, goodwill, and spirit of Scouting came to Boy Scouts of America (BSA) by way of William D. Boyce.

The Purpose, Principles and Methods of Scouting

The Purpose

The purpose of the movement is to contribute to the development of young people in achieving their full physical, intellectual, social and spiritual potentials as individuals, as responsible citizens and as members of the local, national and international communities.

The Principles

The Scout / Guide Movement is based on the following principles:

A. Duty to God:

 Adherence to spiritual principles, loyalty to the religion that expresses them and acceptance of the duties resulting therefrom

B. Duty to others:

- Loyalty to one's country in harmony with the promotion of local, national and international peace, understanding and cooperation
- Participation in the development of society with recognition and respect for the dignity of one's fellowmen and for the integrity of the natural world

C. Duty to self:

· Responsibility for the development of oneself

The Method

The Scout Guide method is a system of progressive self-education through:

1. Promise and Law

a. The Promise

The Promise for the Scout/ Guide: "On my honour, I promise that I will do my best - To do my duty to God* and my country to help other people and to obey the Scout/ Guide Law"

* Word Dharma may be substituted for the word God, if so desired.

b. The Law

The Law for the Scout/ Guide:

- (i) A Scout/Guide is trustworthy.
- (ii) A Scout/Guide is loyal.
- (iii) A Scout/Guide is a friend to all and a brother / sister to every other Scout/Guide.
- (iv) A Scout/Guide is courteous.
- (v) A Scout/Guide is a friend to animals and loves nature.
- (vi) A Scout/Guide is disciplined and helps protect public property.
- (vii) A Scout/Guide is courageous.
- (viii) A Scout/Guide is thrifty.
 - (ix) A Scout/Guide is pure in thought, word and deed.

Learning by Doing

Membership of small groups under adult leadership involving progressive discovery and acceptance of responsibility and training towards self government directed towards the development of character and acquisition of competence, self-reliance, dependability and capacities both to cooperate and to lead.

Progressive and stimulating programs of various activities based on the interest of the participants including games, useful skills and services to the community taking place largely in an outdoor setting in contact with nature. So, it is fun with purpose and challenge and opportunity to improve understanding between generations and getting valuable experience.



Learning by Doing



Sacrifice is the Salt of Service
-Lord Baden Powell

Bharat Scouts and Guides (BSG) - An Introduction

A Historic Overview

The Indian wing of the Scouts and Guides is known as the Bharat Scouts and Guides (BSG). It is the largest voluntary, non-political, educational movement in the country open to all without distinction of origin, race or creed in accordance with the purpose, principles and methods conceived by the founder Lord Robert Stevenson Smyth Baden Powell in 1907. Scouting and Guiding in India mirrors firm determination, commitment to ideals, educated service and world brotherhood.

The first Scout Troop in India, consisting entirely of Indian boys, was formed by a Scottish missionary, in the then Central Province (presently Madhya Pradesh) in 1908. However, the Troop was disbanded in 1910. The three Scout Troops increased to nine different Boy Scout Organizations in early 1911 in Shimla, Calcutta, Jabalpur, Allahabad, Bangalore, Poona, Kirkee, Saidpur and Madras (present Chennai). Efforts to induct Indian boys to Scouts did not materialize till Montague and Chelmsford appeared on the scene as Secretary of the State for India and Viceroy of India respectively in 1917. (The common confirmed date, however, for the start of Scouting in India is 1909, when three troops for British Boys were started at Bangalore, Kirkee and Jabalpur).

The Girl Guide movement got a start in India in Jabalpur (M.P.). In 1911 it expanded enormously. There were about 50 Girl Guide companies with a membership of over 1200 by 1915. Their companies were directly registered with Imperial Scout headquarters, London, like other Scout Organizations, but an All India Girl Guides Association was formed only in 1916.

Unification of Scouting and Guiding

Efforts were made to merge all the Boy Scouts Organizations with the help and assistance of Lord Baden Powell in 1921. These efforts were partly successful. An endeavor was again made in 1937.

There were scattered organisations during the pre-Independence era. However, serious efforts made by leaders like Pt. Jawahar Lal Nehru, first Prime Minister of India, Maulana Abul Kalam Azad, the then Education Minister, Govt. of India, Mr. Mangal Das Pakwasa, the then Governor of Central Provinces and Scout Leaders like Dr. H. N. Kunzru, Pt. Sri Ram Bajpai, Justice Vivian Bose, resulted in the final merger of the Boy Scouts Association and the Hindustan Scout Association. This took place on 7th November, 1950 under the name of the Bharat Scouts & Guides. Thus came into being the Bharat Scouts and Guides. It is a society registered under the Societies Registration Act XXI of 1860. The Girl Guides Association joined the Bharat Scouts and Guides a year later on 15th August, 1951.

Growth of Bharat Scouts & Guides Movement

The number of Scouts and Guides has increased consistently since its inception. Table-1 depicts the significant growth in the number of Scouts during the pre-Independence period. This is evident by the slope of the line in the graph depicted in Fig. 1.



Year-wise increase in the number of Scouts

No.	Year	No. of Scouts
1.	1912	502
2.	1915	2,277
3.	1922	15,202
4.	1926	80,887
5.	1930	1,55,159
6.	1935	2,72,853

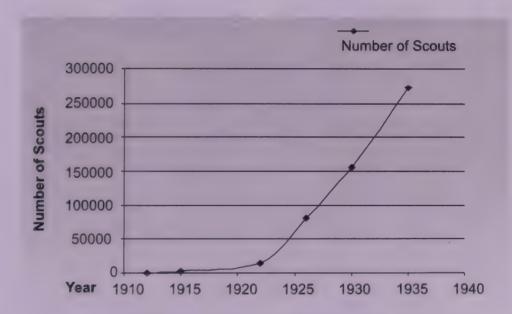


Fig. 1 - Year-wise growth of Scouts during the early days

The number of members of Bharat Scouts and Guides kept on increasing after the establishment of Girl Guides. The enormous increase after 1950 is shown in Table-2. The Fig 2. is a line graph depiction of the same data. The growth of census has been as follows:

Table 2: Year-wise increase in the number of the Scouts and Guides

No.	Year	No. of Scouts (million)	No. of Guides (million)	Total (million)
1.	1950	0.337	0.056	0.393
2.	1971	0.427	0.148	0.575
3.	1979	0.585	0.225	0.810
4.	1990	1.362	0.681	0.681
5.	1995	1.425	0.700	2.125
6.	1998	1.963	0.965	2.928
7.	2003	2.394	1.255	3.649

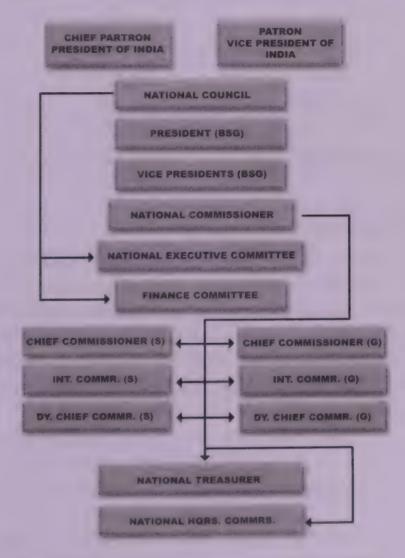


Fig 2. Line Graph of census of BSG members

The number of Scouts as well as Guides has increased enormously over the years. The network of BSG has spread to several States. The census of Bharat Scouts and Guides for the year 2002–2003 is given in Annexure 1.

BSG Organization at a Glance

The Bharat Scouts & Guides (BSG) is a hierarchy starting from the patrols, troops, companies, groups forming into Local, District, State Associations and goes up to the National Organization. The outline of the organizational structure is given below:



Organisational Structure of National Association of BSG

Dr. Hridya Nath Kunzru became the first National Commissioner of BSG in 1952. The names of the subsequent Commissioners are given below:

National Commissioners of the BSG since its inception

No.	Name	Period	
		From	То
1.	Dr. Hridya Nath Kunzru	1952	1957
2.	Justice Vivian Bose	Nov. 57	Nov. 59
3.	Prof. Madan Mohan	Nov. 59	Nov. 60
4.	Dr. Hriday Nath Kunzru	Nov. 60	Nov.64
5.	Mrs. Lakshmi Mazumdar	Nov. 64	Apr. 83
6.	Sardar Lakshman Singh	Apr. 83	Nov. 92
7.	Mr. V.P. Deenadayalu Naidu	Nov. 92	Nov. 95
8.	Mr. L.M. Jain	Nov. 95 onwards	

Decorations and Awards

The National Association of BSG has sanctioned and authorized various kinds of decorations and awards at national and state level like Silver Elephant, Silver Star, Bar to Silver Star and Award for Gallantry at National Level and Medal of Merit, Bar to Medal of Merit, Long Service Decoration, Thanks Badge etc. at the State Level.

Proposed Rajya Puraskar Award and Proficiency Badge on IDDE Programme

During the interactions of the ICCIDD team at Pachmarhi, Madhya Pradesh, in one of the training programmes, Mr. K. Sukumara, Joint Director, Bharat Scouts and Guides suggested the worthwhileness of introducing the "Rajya Puraskar Award". This is the second-most important medal, coming after the top-most President's Award. Accordingly, a syllabus has been prepared and is under discussion with the Bharat Scouts and Guides officials. The draft version of the qualitative requirements and syllabus are given below:

Proposed Qualitative Requirements for Proficiency Badge:

- Pass the test(s) in accordance with Bharat Scouts and Guides norms
- 2. Iodine Deficiency Disorders Elimination (IDDE) Programme related:
 - 2.1 Become proficient with the Frequently Asked Questions (FAQ) at retail shop and household level
 - 2.2 Conduct field activities
 - 2.3 Salt sample collection from Households
 - 2.4 Salt sample collection from Retail Shops
 - 2.5 Observe and prepare a report on storage and package of iodized salt retail level and household level
 - 2.6 Compile a report in accordance with the Household/ Retail shop Questionnaire
- 3. Submit a project (using salt testing kit and/or analyse using titration method in the school)
- 4. Information dissemination, e.g. in school assembly, Scouts & Guides events etc.
- 5. Taking an oath to promote sustainable Elimination of lodine Deficiency Disorders

- 6. Attend at least one training programme in IDDE
- 7. Spreading message by word of mouth (W.O.M.)

Desirable:

- Visit a salt production & iodisation plant and make a report
- 2. Participation in a competition e.g. slogan writing, essay writing, limericks, elocution, poster making etc.
- 3. Observe at least two cases of Iodine Deficiency in any form e.g. goitre, cretins, psychomotor incoordination.

 Make a record of observations



Scouts and Guides watching with rapt attention at the ICCIDD presentation/interactive session of Tribal Scouts and Guides Rally at Raipur, in October 2002.

Iodine Deficiency & Iodised Salt : Some Basic Facts

What every family and community has a right to know about lodine Deficiency Disorders (IDD)

Regular & adequate Iodine supplementation to pregnant mothers & children is the best way to ensure optimum physical & mental development of the fetus & the newborn child

Iodine: Iodine is an element essential for the normal growth and development in animals and human beings. It is one of the halogens with a relatively high atomic weight of 127. It occurs in the human body only in small amounts (15 – 20 mg). The requirement of iodine is only 100 – 150µg per day (0.10 – 0.15 mg). Because of this iodine is referred to as a trace element. Iodine is an important constituent of thyroid hormones.

- (i) Functions: The thyroid hormones are essential for the various brain growth and development.
- (ii) Sources of Iodine: Iodine occurs in nature, predominantly in oceans and soil. Iodine was originally present in soil abundantly. However, a large amount of iodine was leached from the surface of the soil by glaciations, snow, rain, floods and winds. Thus, the soil gradually became iodine deficient. Crops

grown in these soils will also be iodine deficient, thus resulting in animals and plants being not a good source of adequate iodine. The iodine concentration in sea water is about $50-60~\mu g/L$. As sea water contains good amount of iodine, sea weeds and sea fish/animals are a good source of iodine; but these are consumed only by selected communities or segments of population.

(iii) Requirement of Iodine: The thyroid gland needs to trap from circulation about 60μg of iodine per day. To ensure this amount of iodine, one must consume about 100 – 150μg of iodine per day. It is essential that iodine is taken in this small amount every day. It cannot be consumed at one time.

The average daily requirement of an adult is 150 µg and that of pregnant and lactating women increases to 200 µg.

Iodine: An Essential Micronutrient

- · Iodine is a trace element
- All vertebrates extract iodine, concentrate it and secrete it in hormonal form
- · Iodine is an essential component of the thyroid hormones
- It is present in body in minute amounts (15-20 mg)
- · Thyroid hormones:
 - Needed for regulation of body metabolism
 - Needed for optimal mental & physical development

Unborn Child - The most vulnerable

- 90 % of the growth & development of the human brain takes place between 3rd month of pregnancy to 3rd year of life
- This makes it vital that all expecting mothers get their daily iodine requirement



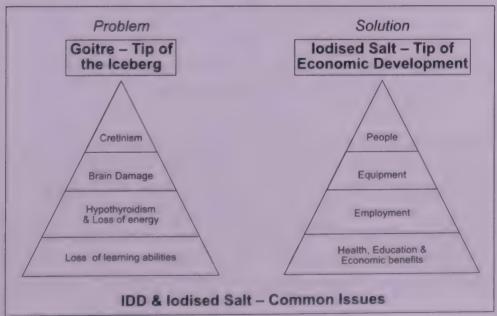
Requirements of lodine

The causes for iodine deficiency in humans should be considered in the light of the iodine requirements in human beings. The ideal iodine intake as recommended by WHO/UNICEF/ICCIDD is shown in the following table:

Recommended daily lodine intake in human beings (WHO/UNICEF/ICCIDD)

No.	Age Group	Iodine Requirement
1.	Infants (0-11 months)	50 μg
2.	Children (12 to 59 months)	90 µg
3.	School age children (6-12 years)	120 µg
4.	Adults (Above 12 years)	150 µg
5.	Pregnant and lactating women	200 µg

Cause of Iodine Deficiency: Prolonged consumption of food which is deficient in iodine results in iodine deficiency. All foods grown in iodine deficient soil are a poor source of iodine. Iodine deficiency can also be caused if some chemicals interfere with the 'trapping of iodine' by the thyroid, which is relatively a rare cause for iodine deficiency.



Ill-effects of iodine deficiency

Iodine Deficiency Disorders (IDD) and Learning Skills: Iodine deficiency causes a spectrum of disorders – goitre, cretinism, psycho-motor incoordination, stunting, speech and learning defects, abortions and still births. However, of concern is the impaired development of the brain and central nervous system in early fetal life in humans. These changes are irreversible and hamper learning abilities, leading to loss of 13 IQ points in the population living in iodine deficient areas. Further, iodine deficiency, when present in mild to moderate proportions, may not show any visible changes in the size of the thyroid gland but still has effects on the brain and central nervous system development in early life. Iodine Deficiency Disorders (IDD) can affect people of all age groups. The physiological consequences depend on the age at which the deficiency occurs.

Implications of Loss of I.Q.

Poor Scholastic performance

Frequent failures / grade repetitions

Absenteeism / drop outs

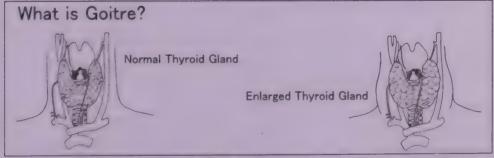
Reduced impact on economic and social developments

Fetal: Fetal brain growth is very sensitive to thyroid hormones. Iodine deficiency at this age prevents the brain from full development. This results in a wide range of defects from mental deficiency, defects of speech and hearing – its extreme form being deaf—mutism, difficulty in walking and muscular co-ordination and squint to varying degrees. These defects are irreversible. These defects form the spectrum of 'cretinism'.



Infancy and Childhood: Iodine deficiency affects the developing brain and can have various consequences e.g. mental retardation, speech defects, hearing defects, squint, delayed motor development, growth failure, lack of energy and muscular incoordination.

Adolescents and Adults: When there is iodine deficiency, the iodine available in the blood is not enough for the thyroid gland. As a result, in an effort to trap more iodine the thyroid gland enlarges. This is a compensatory effort, on the part of the thyroid gland, which continues to occur till the deficiency lasts, resulting in goitre. Goitre is the most common and easily recognizable consequences of iodine deficiency. However, even in the absence of such recognizable signs, a person can be iodine deficient. This sub-clinical iodine deficiency has a serious consequence in terms of education and physical performance. Deficiency of iodine in adolescence causes impaired mental function and retarded physical development. Deficiency of iodine in adults causes Goitre with its complications, hypothyroidism and impaired mental function. Thus, adolescents and adults with iodine deficiency lack energy, tire easily and are less productive.



A goitre is a swelling of the neck caused by an enlarged thyroid gland. When the body does not get enough iodine, the thyroid increases in size. Not all goitres are visible. Many of them, particularly in the early stages, can be detected only by an experienced doctor. It is only when a goitre grows quite large that it can be seen and recognised by everyone. A person with a goitre may also have other hidden iodine deficiency disorders.

Spectrum of Iodine Deficiency Disorders		
Stage in Life	Health Effects	
Fetus	Increased infant mortality	
	Neurological cretinism:	
	 Mental deficiency 	
	• Deaf-mutism	
	Spastic diplegia	
	Squint	
Myxedematous • Mental deficiency		
cretinism	• Dwarfism	
	Psychomotor defects	
Neonate	Neonatal goitre	
	Neonatal hypothyroidism	
Infant and Child	Goitre	
	 Juvenile hypothyroidism 	
	Mental retardation	
	 Speech defects 	
	 Hearing defects • Squint 	
	 Delayed motor development 	
	 Growth failure or stunting 	
	 Lack of energy 	
	Muscular incoordination	
Adolescent • Impaired mental function		
and Adult	 Retarded physical development 	
	 Goitre with its complications 	
	 Hypothyroidism 	
	 Impaired mental function 	
	· Iodine Induced Hyperthyroidism	



Effects of Iodine Deficiency in Humans



- 1. Treatment: Only early stages of goitre can be reversed by iodine supplementation. In general, IDDs cannot be treated. However, they all can be prevented. Large goitres are corrected by surgery.
- 2. Methods of prevention of IDD: Prevention of iodine deficiency disorders is by three methods. These are:
 - (i) Dietary Modification: The term dietary modification means changing the diet of the population so that they consume nutrient rich foods. However, this approach is not applicable for iodine deficiency because all the foodstuffs grown in iodine deficient soil will be deficient in iodine.
 - (ii) Supplementation of the nutrient: This means provision of the nutrient as a tablet or injection. As the requirement of iodine is very small, daily supplementation is difficult.

However iodized oil given orally or as injection is used for control of IDD. Due to its cost and problems in implementation, its use is currently limited to severely deficient areas.

(iii) Fortification: Adding the nutrient to foodstuff like salt, wheat flour, milk, bread, sauce etc. is called fortification. Foodstuffs which are regularly consumed by all sections of the community, are used for fortification. Salt is used as the vehicle for iodine fortification as all sections of the community use it. Adding iodine to the salt does not change the color or taste of the salt.

The Government of India recognized the need to control iodine deficiency disorders and started the National Goitre Control Programme in 1962. The method of control chosen was supply of iodized salt. This was based on the successful experiment in the Kangra Valley in Himachal Pradesh, where regular use of iodized salt reduced the goitre in the population by almost half in a time span of five years.

3. Iodisation of salt: The amount of iodine to be added depends upon the iodine requirement of the body and average per capita consumption. It has been estimated that on an average, an individual consumes 10 gms of salt. Thus, to provide 150µg of iodine in 10 gms of salt, the iodine which needs to be added is 15 parts per million (ppm) or 15 mg of iodine per kilogram of salt. However, iodine is lost from salt if it is exposed to moisture, heat and sunlight. Therefore, for the salt to retain the iodine at 15 ppm, it will need to contain more at the production stage. In India, it is recommended that salt should contain not less than 30 ppm iodine at production stage. However, efforts should be made at all levels to take adequate steps for preventing iodine loss.

- 4. Testing the salt for iodine content: The quality control of salt iodisation through testing is critical to the overall success of any Iodine Deficiency Disorders (IDI) elimination programme.
- 5. Methods of measuring iodine in salt: Two techniquε are used in measuring the levels of iodine in salt:
 - (i) Standard Titration Method This is conducted in laboratories. Salt is treated with concentrated sulphuric acid which liberates iodine. The free iodine is titrated with sodium thiosulphate, using starch as indicator. The titration result provides an accurate quantitative estimate of the iodine level in the salt. This method is preferred for accurate checking of salt batches produced in factories and, in cases of doubt, or for resolving disputes.
 - (ii) Salt Test-Kits The kit consist of bottles of starch solution (stabilized) of which one drop is placed on the salt. The intensity of the blue colour that develops indicates the approximate iodine level. Rapid salt testing kits are available commercially. The salt testing kits are simple, rapid and easy to apply. Salt testing kits can be used at production, distribution, retail and household level. However they give information only on the presence or absence of iodine. The salt testing kits can also be used for the education of the community.
- 6. Steps taken for the prevention of iodine loss:
 - · Do pack salt in High Density Polythene (HDPE) bags.
 - Do Not expose salt to sunlight.
 - Do Not store salt in humid places.
 - · Do keep the salt in closed, airtight containers at home.
 - Do Not wash salt before use (common practice with big crystal salt in many parts of India).

Note to Communicators

Iodine is essential for normal physical and mental growth. If the soil and water are deficient in iodine, then crops grown on such soil lack iodine. Consumption of such foods leads to iodine deficiency.

Lack of iodine in the body causes a spectrum of disorders: goitre, mental handicap, defects of speech and hearing, difficulty in co-ordination of movements, walking defects, stunted growth and hypothyroidism. It also causes abortions and still-births. Collectively, these are called Iodine Deficiency Disorders (IDD). More importantly, if there is a lack of iodine during pregnancy, a newborn's brain and body can become permanently retarded and stunted. It is now known that IDD is the most important preventable cause of mental deficiency in the world.

Salt is the ideal and most effective vehicle for supply of iodine to the population. Salt is one food commodity which is consumed in fixed quantity everyday, by all – young or old, men or women, rich or poor, urban or rural population. Farm animals should also be given iodised salt. This will make them grow better, improve their fertility and increase their yield of meat, milk, eggs or wool.

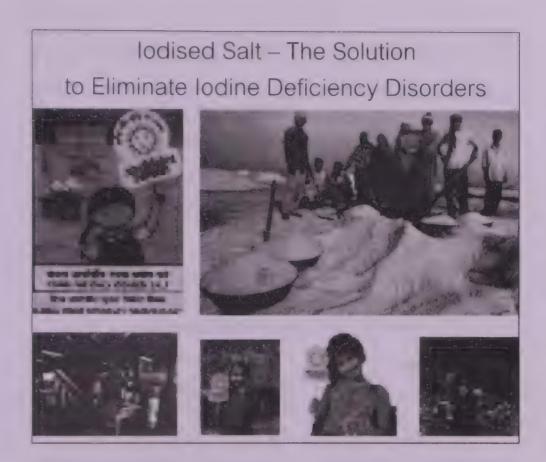
Supporting Information

Children in areas where there is not enough iodine in the soil, water and food can develop mental and physical challenges. Pregnant women who do not consume adequate amounts of iodine are at higher risk of abortions and stillbirths.

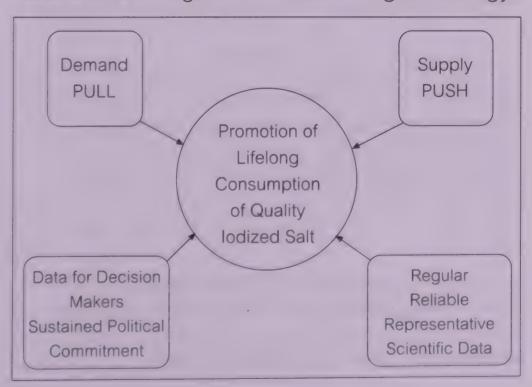
1. Iodine deficiency is a world-wide problem. IDD has been reported as a public health problem in 130 countries of the world. The population "at risk" to IDD in these countries is 38%.

- 2. One out of ten person on an average, in the world has goitre.
- 3. Pregnant women who are deficient in iodine are at a higher risk of frequent abortions and stillbirths.
- 4. Iodine is required for normal growth and development of the brain. By the age of three years, 90% of the growth and development of the human brain is almost complete. Iodine deficiency during pregnancy and just after birth may result in irreversible damage to the child's brain. In its most severe form, this condition results in cretinism mental and physical challenges. This can be totally prevented, if the pregnant mother consumes iodised salt every day.
- 5. The cretin child may have a range of disorders: mental handicap, defects of speech and hearing, difficulty in co-ordination of movements, walking defects, stunted growth and hypothyroidism. These children remain dependent on their mothers and families even when they grow up.
- 6. Goitre is the most common and visible manifestation of iodine deficiency. Goitre in its early stages can be cured by using iodised salt. Once the goitre becomes too big, it is irreversible. The only way it can be removed is undergoing surgical operation. Children living in iodine deficient areas are less intelligent as compared to children living in areas where there is sufficient iodine in the soil, water and food.
- 7. It has been shown that children living in iodine deficient areas, on an average, have 13 I.Q. points less than those living in iodine sufficient areas.

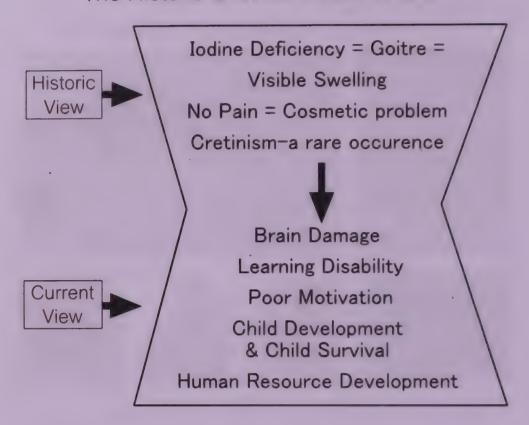
- 8. These may look 'normal', but due to low intelligence their performance in school is poor. They need to repeat their grades often and subsequently drop out from the school. All this causes great burden on our resources required for education and health. Daily use of iodised salt prevents all Iodine Deficiency Disorders. Always eat and cook with iodised salt. It is safe and effective.
- 9. Iodised salt is the most widely practiced and accepted method of getting iodine into the diet. It is simple, physiologically effective, safe and economical.
- 10. Daily use of iodized salt prevents all disorders due to iodine deficiency.
- 11. It is absolutely safe to use iodised salt for the entire family. There are no adverse effects from consuming iodised salt. Any extra quantity of iodine consumed is excreted through urine.
- 12. Like human beings, animals are also affected by the disorders caused by iodine deficiency. Reproductive failure is the most common manifestation of iodine deficiency in farm animals.
- 13. The lack of iodine in the diet of farm animals reduces the yield of meat, milk, eggs and wool.
- 14. Farm animals should also be given iodised salt. This will make them grow better, improve their fertility and increase their yield of meat, milk, eggs or wool.



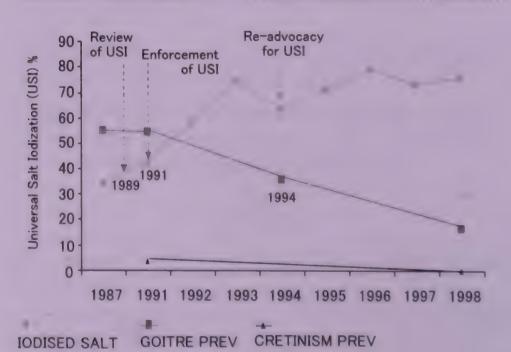
IDD Control Programme - Multi Pronged Strategy



The Historic & Current View of IDD



IDD is Preventable - The Evidence from Sikkim



20 Questions on IDD

Shri Mohan Dharia released the "20 Questions on IDD" in Hindi at the 'Training Program of Teachers (Scout Masters and Guide Captains)', on the 7th October, 2003, New Delhi. The Hindi and English versions of the "20 Questions on IDD" are given below.

1. What is iodised salt?

Iodised salt is common salt to which a very small quantity of an iodine compound has been added (30mg of Iodine per kg of salt). Iodised salt looks, tastes and smells exactly like common salt and is used in the same way, and for the same purposes. Iodised salt is used to prevent iodine deficiency disorders (IDD).

2. What is iodine?

Iodine is a natural element, a mineral, and like carbohydrates, fats, proteins, and vitamins, is an essential constituent of human diet. Iodine is also called a "micronutrient" (like vitamin A and iron) because it is required in very small amounts by our body.

3. How much iodine does a person normally need?

The daily requirement of iodine for an adult is 150 micrograms. Pregnant women and lactating mothers however, need more iodine (200 micrograms on average). The total iodine requirement for a person living up to 70

years of life would add up to less than a teaspoonful. However, as there is no storage organ for iodine in the body, it is necessary for iodine to be included in our daily diet. The usual sources of iodine containing foods are meat, fish, vegetables, milk, cereals and water.

4. How do we become iodine deficient?

Our normal requirement of iodine comes directly or indirectly from crops grown on iodine rich soil and from fish and seaweeds. So, when the soil of any area lacks iodine, the crops too are deficient in this essential nutrient. People who eat these crops regularly do not get their requirement of iodine and ultimately develop iodine deficiency.

5. How is iodine used by the body?

The thyroid gland is an (endocrine) gland located in the front of the neck. Iodine is used by this gland to produce thyroid hormones.

6. Why is iodine important?

Thyroid hormones are essential for normal growth, development and functioning of both the brain and body. Lack of iodine results in deficiency of these hormones and results in a wide spectrum of disorders, collectively called iodine deficiency disorders (IDD). Iodine deficiency can lead to goitre, cretinism, deafness, dumbness, squint and mental retardation.

The most visible and easily recognizable sign of iodine deficiency is goitre. A goitre is an enlarged thyroid gland which can range in size from an invisible swelling to a monstrous growth in the neck.

7. Why is it important for a pregnant woman to have sufficient iodine in her diet?

In the mother's womb, a baby/foetus needs a steady supply of iodine for the normal growth and development

of its brain and body. Only the mother can provide this. But if the mother is iodine-deficient, the child too becomes iodine deficient. If the woman's deficiency is severe, the child's brain and body are seriously and permanently damaged and the child becomes a cretin, unable to hear, talk, walk or think normally. Iodine deficiency during pregnancy may also result in abortion or stillbirth.

The critical period for brain growth is from conception to the first three years of life. Optimum iodine nutrition during this period is absolutely essential for normal brain development.

8. Does iodine deficiency in a child affect his/her performance in school?

In cases of mild iodine deficiency, even though the child looks normal, s/he will have mild mental retardation on closer examination. Children living in iodine-deficient areas could have an Intelligence Quotient (IQ) level 13 points lower than those living in iodine sufficient areas, which will affect his/her school performance.

- 9. Why is iodine added to common salt?

 Salt is an ideal vehicle for addition of iodine as it is usually needed in fairly constant daily amounts. Salt is thus the most suitable food item for iodine fortification, and is effectively being used in many developed and developing countries. The techniques for iodisation are simple and well established. The added iodine does not affect the appearance or taste of salt and is well accepted by the consumer.
- 10. Why can't iodine be taken separately, like other medicines?

An important fact about iodine is that although it is needed in tiny amounts, it is needed regularly, every day. If given like a medicine/vitamin, this would involve taking

it daily for the rest of our lives. Salt, however, is something that is used by everyone, every day. On an average, the same amount of salt (10 to 15 grams) is consumed every day. If this salt is iodised, then the population automatically gets the required amount of iodine.

11. Can everyone consume iodised salt? Will there be any harm if a person who is not iodine-deficient eats iodised salt?

All of us need only a certain amount of iodine to function normally. If this iodine is already available, the body will simply reject any additional quantities and excrete it unused through the urine.

On the other hand, if someone is deficient in iodine, the thyroid gland will use as much iodine as it needs and reject the rest. This makes iodine safe for everyone.

12. Can iodised salt be stored like normal salt? Is the iodine lost during storage?

YES, iodised salt can be stored like normal salt. However, as the iodine in the salt can be destroyed by prolonged exposure to direct sunlight and moisture, it is important to store the iodised salt in an airtight container made of plastic, wood, glass or clay, with a well-fitting lid. Similarly, if salt is not packed well, iodine loss will take place during transit from production to consumption. Also, iodised salt should be consumed within twelve months of the packing date.

13. Can iodised salt be used like ordinary salt? Is there any loss of lodine during cooking? YES. Iodised salt can be used in cooking, or as table salt.

There is some loss of iodine during cooking (20% – 40%). Therefore, to compensate loss of iodine during distribution.

storage and cooking, higher levels of iodine are added at the production stage.

- 14. Does sea salt provide sufficient quantity of iodine to meet the daily iodine requirements?
 NO. Contrary to popular belief, sea salt does not contain adequate iodine (on an average only 2 micrograms of iodine per gram).
- 15. Can the daily consumption of iodised salt cure goitre, cretinism and other lodine Deficiency Disorders?

NO. Cretinism is permanent and incurable, like many other iodine deficiency disorders, but is preventable. Certain goitres can be "cured" in the early stages.

Regular intake of iodine, however, prevents goitre and other iodine deficiency disorders.

16. Is it also necessary to use iodised salt for livestock?

YES. Iodine deficiency affects domestic animals in much the same way it affects humans. Iodised salt improves the health and productivity of animals and reduces the number of stillbirths and miscarriages. In addition, cattle that are fed on iodised salt produce milk that is rich in iodine.

17. How long will we have to continue using iodised salt?

EVERYDAY, FOR ALL TIME TO COME. If one lives in an iodine-deficient environment, there is no likelihood of the deficiency being corrected at the source, namely, in the soil. On the contrary, the increased degradation

of our environment is making the problem worse. Large scale deforestation, among other things, has led to increased flooding and erosion of the topsoil, which carries away the iodine. Using iodised salt every day is the only way to protect ourselves and our children from the tragic and completely preventable effects of iodine deficiency. It is a small investment towards helping our children, and their children, to get the best chance to grow up with healthy minds in healthy bodies.

18. How can we help to promote the use of iodised salt?

We need to work closely with health care providers, agriculturals, non government organizations, IDD experts, the salt industry, salt regulators, the government, policy makers, communicators, and educators, in creating awareness in the consumers for use of iodised salt.

19. How can we know if the salt we are using is adequately iodised?

There are two commonly used methods of testing iodine content in salt. One method is by using an iodine testing kit. When a drop or two of this solution is added to a teaspoon of salt, it will turn purple if the salt is iodised. Another method is by getting the salt tested in a laboratory (titrimetric method).

20. How can we ensure that people consume iodised salt?

If a law is enforced to ensure production of only iodised salt, it would enable everyone to consume iodised salt.

आयोडीन की कमी से होने वाले दोषों और आयोडीन युक्त नमक के बारे में प्रश्न और उत्तर

- प्रश्न 1 आप नमक में क्या जाँच करना चाहते हैं ?
- उत्तर 1 हम यह देखना चाहते हैं कि नमक में आयोडीन है या नहीं।
- प्रश्न 2 आयोडीन क्या हैं ?
- उत्तर 2 *आयोडीन एक प्राकृतिक तत्व है जो हमारी सेहत के लिए जरुरी हैं।*
- प्रश्न 3 आयोडीन हमारी सेहत के लिए क्यों जरुरी है ?
- उत्तर 3 आयोडीन शरीर व मस्तिष्क दोनों की सही वृद्धि, विकास व संचालन के लिए आवश्यक है।
- प्रश्न 4 हम आयोडीन की जरुरी मात्रा की पूर्ति कैसे कर सकते हैं ?
- उत्तर 4 हम आयोडीन की मात्रा की पूर्ति नियमित रुप से आयोडीन युक्त नमक के सेवन द्वारा कर सकते हैं क्योंकि हमारे भोजन में नमक का सेवन प्रतिदिन होता है।
- प्रश्न 5 एक व्यक्ति को आमतौर पर आयोडीन की कितनी मात्रा की आवष्यकता होती है ?
- उत्तर 5 हर रोज औसतन 150 माइक्रोग्राम, यानि कि सुई की नोंक के बराबर। इसका मतलब यह हुआ कि आपको जीवन भर के लिए छोटे से चम्मच से भी कम आयोडीन चाहिए।
- प्रश्न 6 हम एक चम्मच आयोडीन एक साथ ही खा लें तो?
- उत्तर 6 हमें आयोडीन की जरुरी मात्रा का सेवन प्रतिदिन करना आवश्यक है। अगर हम एक चम्मच आयोडीन एक साथ एक ही बार में खा लें तो कोई फायदा नहीं होगा। क्योंकि हमारा शरीर जितनी आयोडीन आवश्यक है, उतनी ही ग्रहण करता

है, बाकी आयोडीन पसीने व मूत्र द्वारा शरीर से बाहर निकल जाती है।

- प्रश्न 7 पर्याप्त मात्रा में आयोडीन न मिलने पर क्या होता है ?
- उत्तर 7 पर्याप्त मात्रा में आयोडीन न मिलने पर सिर्फ घेघा ही नहीं होता, बल्कि शरीर व दिमाग में और भी कई खराबियां पैदा हो सकती हैं, जिनमें से कुछ मामूली होती है, तो कुछ खतरनाक। (जैसें प्रश्न 8 और 9)
- प्रश्न 8 आयोडीन की कमी से और क्या हो सकता है ?
- उत्तर 8 आयोडीन की कमी से मंद बुद्धि, छोटा कद, बहरा-गूंगापन, ठीक तरह से चलने में बाधा आदि परिणाम हो सकते हैं। इसके अलावा गर्भपात का खतरा या फिर मरा हुआ बच्चा पैदा होने की आशंका भी रहती है।
- प्रश्न 9 आयोडीन की कमी से बच्चों पर क्या प्रभाव होता हैं ?
- उत्तर 9 आयोडीन की कमी से स्कूल जाने वाले बच्चों में पढ़ने—लिखने की क्षमता कम हो जाती है और शरीर भी चुस्त नहीं रहता।
- प्रश्न 10 क्या गर्भवती महिलाएं, छोटे बच्चे या बीमार व्यक्ति आयोडीन मिला नमक खा सकते हैं? क्या यह सामान्य नमक जैसा ही होता है ?
- उत्तर 10 हाँ, आयोडीन हर इन्सान को हर रोज चाहिए, चाहे वह छोटा हो, बड़ा हो, बीमार हो या भला—चंगा हो। गर्भवती औरतों और छोटे बच्चों को तो इसकी और भी अधिक जरुरत होती है इसलिए हर रोज आयोडीन युक्त नमक खाना सिर्फ ठीक ही नहीं, बल्कि जरुरी भी है।
- प्रश्न 11 क्या आयोडीन युक्त नमक जानवरों को दिया जा सकता है ?
- उत्तर 11 जी हां, आयोडीन युक्त नमक जानवरों के लिए अच्छा है। इसका असर उनकी सेहत और उत्पादकता पर पड़ता है। अगर हम जानवरों को आयोडीन युक्त नमक खिलाते हैं तो मरे हुए बच्चे

पैदा होने और गर्भस्राव होने की संभावना कम हो जाती है। इसके अलावा जिन पशुओं को आयोडीन युक्त नमक दिया जाता है, उनका दूध भी आयोडीन से भरपूर होता है।

प्रश्न 12 हमें कैसे पता चलेगा कि नमक में आयोडीन है ?

- उत्तर 12 एक कम दाम वाली आयोडीन परखने वाली टेस्टिंग किट (परीक्षण किट) भी उपलब्ध है इसकी सहायता से आप आसानी से पता लगा सकते हैं कि नमक में आयोडीन है या नहीं। किट में रासायनिक घोल होता है। इसकी एक बूंद यदि थोड़े से नमक में डाली जाए और वह नमक हल्के या गाढ़े नीले/बैंगनी रंग में बदल जाए तो इसका मतलब है कि नमक में आयोडीन है। यदि नमक का रंग न बदले तो इसका मतलब है कि इसमें आयोडीन नहीं है।
- प्रश्न 13 क्या आयोडीन युक्त नमक सामान्य नमक की तरह रखा (स्टोर किया) जा सकता है?
- उत्तर 13 नहीं, आयोडीन युक्त नमक को रखने (स्टोर करने) के लिए कुछ सावधानियाँ बरतनी होंगी। आयोडीन वाले नमक को सूरज की सीधी रोशनी, अधिक ताप और नमी से बचा कर रखना चाहिए नहीं तो इसमें मिली आयोडीन खत्म हो सकती है इसलिए इसे आप प्लास्टिक, लकड़ी, मिट्टी या शीशे के ढक्कनदार बर्तन में ठीक से बन्द करके रखें।
- प्रश्न 14 नमक खरीदते समय हमें कैसे पता चलेगा कि इसमें आयोडीन है या नहीं ?
- उत्तर 14 नमक खरीदते समय देखें कि नमक चाहे किसी भी कम्पनी का हो, उसमें 'आयोडीन नमक' का लेबल लगा हो।
- प्रश्न 15 क्या यह जरुरी है कि हमें सिर्फ रिफाइन्ड पैकेट वाला आयोडीन नमक ही खरीदना चाहिए?
- उत्तर 15 नहीं यह जरुरी नही। करकच या फोड़ा नमक में भी आयोडीन मिला होता है और यह आयोडीन नमक उतना ही प्रभावशाली है जितना रिफाइन्ड पैकेट वाला नमक।

- प्रश्न 16 खाने की ऐसी कौन सी चीज़ें हैं जिसमें सबसे अधिक आयोडीन होता है ?
- उत्तर 16 किन्हीं समुद्री वनस्पतियों को छोड़कर ऐसी कोई खाने की चीज नहीं है जो स्वयं आयोडीन से भरपूर हो । अन्न या साग सब्जियों में आयोडीन जमीन से आती है। अगर जमीन में आयोडीन की कमी है तो वहां उगी साग—सब्जियों या अनाज में भी उसकी कमी होगी।
- प्रश्न 17 भारत में आयोडीन की कमी से प्रभावित क्षेत्र कौन से हैं ?
- उत्तर 17 आयोडीन की सबसे अधिक कमी हिमालय की तराई में बसे नगरों व गांवों में है। उत्तर में जम्मू और कश्मीर से लेकर उत्तर-पूर्व तक 2500 वर्ग किलोमीटर का समूचा इलाका इस कमी का शिकार है। लेकिन महाराष्ट्र, गुजरात, मध्यप्रदेश, आन्ध्रप्रदेश, उड़ीसा, कर्नाटक, केरल, तमिलनाडु, गोवा, राजस्थान, पश्चिम बंगाल और यहाँ तक कि दिल्ली, मुंबई, चंडीगढ से भी इस कमी के समाचार मिले हैं। देखा जाए तो भारत का कोई राज्य ऐसा नहीं जहाँ आयोडीन की कमी नहीं है।
- प्रश्न 18 हमें आयोडीन युक्त नमक कब तक खाते रहना होगा ?
- उत्तर 18 जीवन भर! हम हर रोज आयोड़ीन युक्त नमक खाकर अपने व अपने बच्चों के स्वास्थ्य की रक्षा कर सकते हैं और आयोड़ीन की कमी से होने वाले दोषों से बच सकते हैं। इससे हमें अपने और बच्चों के स्वस्थ शरीर में स्वस्थ मस्तिष्क के साथ बढ़ सकने का सर्वोत्तम अवसर मिलता हैं। और यह इसके लिए एक बहुत छोटी लागत हैं।
- प्रश्न 19 आयोडीन की कमी से बचने का आसान तरीका क्या है ?
- उत्तर 19 आयोडीन की कमी से बचने का आसान तरीका है कि हम सब सिर्फ आयोडीन वाला नमक ही रोज़ाना खाएं।

प्रश्न 20 हमें लोगों को कैसे समझाना चाहिए कि वे आयोडीन युक्त नमक इस्तेमाल करने लगें ?

उत्तर 20 हम लोगों को यह समझा सकते है कि आयोडीन युक्त नमक ही इस्तेमाल करें क्योंकि,

> "आयोडीन युक्त नमक प्रतिदिन बुद्धि और स्वास्थ्य सुरक्षित हरदिन"

















Some Basic Facts about Salt and Salt Iodisation & Production

Genesis of word Salt:

Latin, Sal - Salarium means Salary

The word salt is derived from the Latin word 'sal' or 'salarium' meaning salary. In Roman society, salt was used as currency, and soldiers were paid in salt. Based on this, we have the familiar phrase that a person is "worth their salt", meaning worth the wages one receives. The mineral name for salt is sodium chloride, which was formally known as halite. The word halite is derived from the Greek word hals meaning salt. The mineral name of 'sodium chloride' was given by E. F. Glocker in 1847.

Background

Salt, composed of sodium chloride (NaCl), is one of the necessities of life for human and animals both. Salt that is mined from solid layers in the ground is called rock salt. When produced along with other, usually powdery, salt-like compounds by evaporation from seawater, it is called sea salt or solar salt. Brine is the term for salty water from which salt can be produced. In chemical usage, salt may refer to any compound of a metal and non-metal. Sodium chloride is sometimes referred to as "common salt" or "table salt", to distinguish it from other salts.

Sources

Salt is produced in most of the countries of the world. After

the United States of America, the largest producers of salt are China, Germany, India, and Canada. In most other countries having a seacoast, salt for local use is produced by evaporation of seawater.



Salt is used in human and animal diet, food seasoning and food preservation; to prepare sodium hydroxide, soda ash, caustic soda, hydrochloric acid, chlorine, metallic sodium; in ceramic glazes, metallurgy, curing of hides, mineral waters, soap manufacture, home water softeners, highway de-icing, photography, herbicide, fire extinguishing, nuclear reactors, mouthwash and medicines.

Salt Production Methods and Practices

The production of common salt is one of the most ancient and widely distributed industries in the world. Salt is produced by mining of solid rock deposits and by the evaporation of sea water, lake, playa (desert basin) and underground brines. Rock and solar salt account for roughly 50% of production each. The requirements of Europe and North America are met mostly by mining. In Asia, Africa, Australia and South America, solar evaporation is the main source.

lodised Salt

Iodised salt is nothing but ordinary common salt in which a very minute quantity of an iodine compound (potassium iodate) is thoroughly mixed. Iodised salt looks, smells and tastes exactly like common salt and can be used like ordinary salt. Iodised salt is available in different varieties viz. crystal,

08690 PARTNERSHIP KEY TO SUCCESS AND SUSTAINABILITY

crushed and powdered varieties in loose and packed from and refined variety in packed form.

Since iodine is a constituent of sea water, it is often incorrectly assumed that sea salt contains sufficient iodine for nutritional purposes. The total dissolved salts in seawater contain less than 2 micrograms of iodine per gram of salt, equivalent theoretically to about 3 micrograms of iodine for every gram of recovered sodium chloride (3 parts per million). Even this small quantity of iodine is mostly lost in the residual mother liquor that is drained out during the production process and should be disregarded in calculations to establish the level of iodine supplementation.

lodine and potassium iodate

In India, the iodizing chemical chosen is potassium iodate, owing to its high stability in tropical weather conditions and quality of raw salt. It is added to salt at 50 parts per million (ppm) level (equivalent to 30 ppm of iodine). Taking into consideration the transportation and storage losses, the iodised salt at the retail level is expected to contain a minimum of 25 ppm of potassium iodate or 15 ppm of iodine.

The basic raw material, iodine, required for the manufacture of iodizing chemical potassium iodate, is imported as there is no known source in the county. There are 19 potassium iodate manufacturing units in India and enough capacity has been created to meet the present as well as future needs. The requirement of iodine to iodise the entire edible salt in the country is 150 tons per annum. The foreign exchange involved in the import of iodine with the present Cost, Insurance and Freight (C.I.F.) is about Rs. 100 million for a population of 1,000 million this comes to 10 paise per person per year.



lodisation Process

Salt iodisation is a simple process and does not require sophisticated technology. It involves uniform mixing of potassium iodate with common salt and it is achieved by several methods, viz. spray mixing, submersion, drip feed, dry mixing etc. The commonly adopted methods are spray mixing and drip feeding.

The spray mixing process involves spraying of 3–4 % aqueous solution of potassium iodate in common salt and mixing it thoroughly in a screw conveyor cum mixer. The plant design has been standardised and is fabricated indigenously. Various capacities of the continuous plants ranging from 2 to 8 tons per hour of both mobile and fixed type are available. Depending on the materials of construction, the price ranges from Rs.100,000 to Rs.125,000.

The Submersion Process developed by the Central Salt & Marine Chemical Research Institute, Bhavnagar (Gujarat) consists of three brick masonry tanks. The common salt to be iodised is spread to a thickness of 9 to 12 inches in the submersion tank and saturated brine with calculated quantity of potassium iodate is let into it. After allowing a contact time of 10 to 15 minutes, the solution is discharged and the salt coated with potassium iodate solution is spread to dry. A five ton per day plant costs about Rs.270,000.

The drip feed process is ideally suited for undertaking the twin operations of powdering and iodisation simultaneously. The process consists of allowing potassium iodate solution to fall in drops on the salt when it is fed into the grinder. Entrepreneurs adopt this process for marketing iodised salt in consumer packs. The cost of the plant is about Rs.35,000. It has a capacity of 2000–3500 tons per annum.

In the dry mixing process, the equipment used is the same as that of the Batch type spray process plant and instead of adding potassium iodate in solution form, a pre-mix containing potassium iodate and anti-caking agent is mixed with common salt.



Refined iodised salt is produced in refineries where common salt is upgraded by removing salts other than sodium chloride, viz. calcium, magnesium etc. Moisture content is kept below 1 % with the help of a drier. In order to impart a free flowing characteristic to the refined salt, additives and crystal modifier such as aluminium silicate, magnesium carbonate, potassium ferro cyanide etc. are added to the permitted extent. The cost of a 3 tons per hour plant is about Rs.4,500,000.

Quality

Iodised salt being a food item, its quality specification is covered under the provision of the Prevention of Food Adulteration Act, 1954 and the rules made thereunder. In addition to characteristics like sodium chloride, matter insoluble and soluble in water, the iodine content at manufacture and distribution channel including retail level are specified as 30 and 15 parts per million (ppm) respectively.

Though Salt Department, through its network of laboratories established at the salt producing areas, undertakes test check of quality of the iodised salt produced, the responsibility of ensuring the quality of iodised salt squarely lies with iodised salt producers. For this purpose, the Salt Department insists on the establishment of a laboratory at the production site. A spot test kit, which indicates the presence of iodine over a range is also available. A drop of test solution added to iodised salt turns it blue and the intensity of the colour is compared with a standard colour.

Assistance available for establishing iodisation units in India

Salt iodisation units established with the specific permission of the Salt Department are eligible for the following assistance:

 The Salt Department provides free technical guidance in selection of machinery for setting up of iodisation plant, training of personnel in operation and maintenance of the plant.

- Samples of iodised salt, potassium iodate, common salt etc. are tested in the Salt Department laboratories free of cost for guidance and quality improvement.
- Free training courses are conducted by the Salt Department for the benefit of laboratory personnel on the quality assurance.
- Salt co-operative societies and small salt producers associations were provided with 40 spray type salt iodisation plant along with one year requirement of potassium iodate free of cost.
- Transport of iodised salt by rail from production to consuming centres has been accorded higher "B" priority, to facilitate quicker movement. Further, Railways provide covered wagons during the monsoon.

Requirement of Iodised Salt

The daily salt consumption as per the multi-centric study conducted by the Indian Council of Medical Research averages 13.8 grams. Accordingly, the annual per capita consumption works out to 5 kg. Based on the population, the requirement of salt for human consumption is estimated to be of the order of 5 million tons for a population of 1,000 million.

Varieties and types of iodised salt

Iodisation can be carried out on various types of salt. Crystal, crushed, powdered and refined varieties of salt could be iodised. In case of crystal salt, it should be ensured that the size does not exceed 4 mm so as to achieve uniform iodisation. Iodised salt is available in the market in the following forms:

 Crystal iodised salt packed in 75 kg High Density Polyethylene (HDPE) woven sacks, which is invariably marketed at retail level in loose form.

- Crushed iodised salt packed in 75 kg in HDPE woven sacks sold at retail level in loose form.
- Powdered iodised salt packed and sold in 1 and ½ kg plastic pouches, and
- Refined iodised salt is packed and sold in 1 and ½ kg plastic pouches.

There is a misconception in certain quarters that only salt packed in 1 or ½ kg plastic pouches is iodised. This is totally baseless; even salt sold loose could also be in iodised form. Of course, iodised salt packed in 1 kg or ½ kg plastic pouches retains iodine for longer period and it is not adversely affected by conditions like rain, humidity, dust etc. Hence, it would be preferable to purchase iodised salt packed in pouches.

Price of iodised salt

The price of iodised salt (like any other commodity) varies, depending upon the quality of raw salt used, packing material etc. Crystal iodised salt in 75 kg packing is sold at production sources (ex-factory) at a price ranging from Rs. 300/- to 500/- per ton whereas the crushed iodised salt is costlier by Rs. 50 to 60 per ton. Powdered iodised salt in 1 kg polythene pouches is available at about Re.1 per kg at the production centres.

The price of iodised salt at the retail level depending on the variety and packing, ranges from Rs.1.50 to 5.50 kg, as indicated below:

1.	Crystal iodised salt in loose form	Rs. 1.50 - 2.00
2.	Powdered/Crushed iodised	Rs. 2.00 - 2.50
	salt in loose form	
3.	Powdered iodised salt in pouches	Rs. 2.50 - 4.50
4.	Refined iodised salt in pouches	Rs. 5.50 & above

Administration

The Salt Department is headed by the Salt Commissioner with its headquarters at Jaipur (Rajasthan). Under him, there are 5 Regional Offices located at Chennai, Mumbai, Ahmedabad, Jaipur and Kolkata. The first four are headed by the Deputy Salt Commissioner and the last by an Assistant Salt Commissioner. The IDD Control Division is under the charge of the Deputy Salt Commissioner (NIDDCP) stationed at the Headquarters, Jaipur.

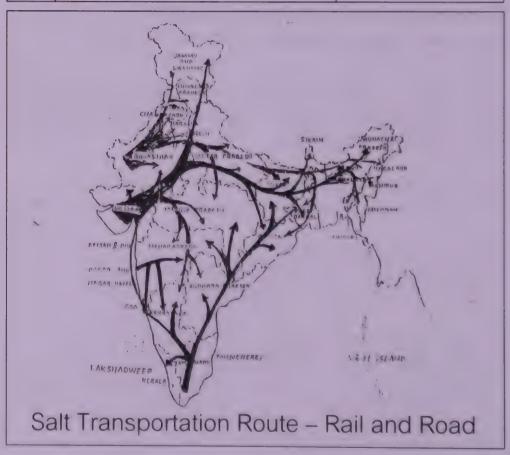
Production

Salt production of 17.8 million tones was achieved during the year 2002, the highest production so far. Cooperative Societies contributed 7.3 % of the total production of salt during 2002 as against 6 % in 2001. There are 6 Public / Joint sector undertakings engaged in the manufacture of salt. Their total production during the year 2002 was 0.44 million tons which represents about 2.5% of the total production of salt in the country.

The target of iodised salt production for the year 2002–2003 was 5.2 million tons while the production of iodised salt was 3.69 million tons, i.e. 63.6%.

Statistical Data of Salt Production and Distribution

No.	Salt Particulars	2002
		(in million tons)
1.	Production	
	i) Recognized Units	12.6
	ii) Un-recognized Units	5.2
	(area less than one acre)	
	Total	17.8
2.	Distribution	
	i) Human Consumption	4.7
	ii) Export	1.3
	iii) Industries	7.0
	Total	13.0
3.	i) Iodised Salt - Production	4.2
	ii) Iodised Salt - Supplies	3.7



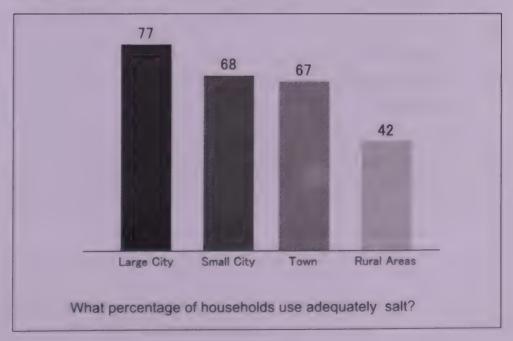


Indian Scenario: Use of Iodised Salt National Family Health Survey – 2 1998-1999

- · 71% of the population consuming some iodine in salt
- 49% use adequately lodised salt (iodine content not less than 15 mg / Kg of salt)
- · 22% use inadequately lodised salt
- 29% use salt with no iodine

Salt iodisation

The Government of India has set the minimum iodine content of salt at 15 parts per million at the consumer level. However, only 49 percent of all households use cooking salt that is Iodised at the recommended level. Twenty nine percent of households use cooking salt that is not Iodised at all. The percentage using adequately Iodised salt is much higher in urban areas than in rural areas. Households in the following states are least likely to use Iodised salt: Tamil Nadu, Kerala, Goa, Rajasthan and Andhra Pradesh.



Why consume lodised salt?

Lack of iodine in the diet can lead to Iodine Deficiency Disorders, which can cause miscarriages, brain disorders, cretinism, goitre and retarded psychomotor development. Iodine deficiency is the single-most important and preventable cause of mental retardation worldwide. Consuming salt fortified with iodine can help prevent iodine deficiency.

- NFHS-2, with its nationally representative sample of households, was an ideal vehicle for measuring the degree of iodisation of salt used in household throughout India.
- NFHS-2 interviewers measured the iodine content of cooking salt in each interviewed household using a rapid test. The rapid test kit can be reliably used for semi-quantitative estimation of the iodine content of salt used in the community.
- In India, more than one-quarter of households use salt that is not Iodised at all and one-fifth use salt use that is inadequately Iodised.
- Seventy-eight percent of households with a high standard of living use adequately Iodised salt compared with only 35 percent of households with a low standard of living.
- Consumption of iodised salt is particularly low in households headed by persons from scheduled castes, scheduled tribes and other backward classes.



Role of Salt Department in Elimination of IDD in India

S. Sundaresan

Spectrum & Magnitude of IDD

lodine is one of the essential nutrients required for normal mental and physical development of human beings. The human body requires around 150 micrograms of iodine every day, which works out to less than a teaspoonful (5 gm) over a life span of seventy years! The disorders caused due to deficiency of nutritional iodine in the food/diet are called IODINE DEFICIENCY DISORDERS (IDD). It affects people of all ages, both sexes and different socio-economic status. It can result in abortion, still-birth, mental retardation, deafmutism, dwarfism, squint, cretinism, goitre of all ages, neuromotor defects. It also causes a loss of about 13 IQ points in children hampering human resource development.

The surveys conducted by the Central/State Health Directorates, Indian Council of Medical Research (ICMR) and Medical Institutes have revealed that not even a single State/Union Territory is free from the problem of IDD. According to the Director General Health Services, Ministry of Health & Family Welfare, New Delhi, out of 312 Districts surveyed in 28 States and 6 Union Territories, 254 districts are endemic to IDD where the prevalence is more than 10 per cent. In India, it is estimated that 200 million people are at risk of IDD.

Salt - The Most Accepted Carrier for Iodine Supplementation

Salt is the most effective and widely accepted vehicle for supplementation of iodine for the following reasons:

- Mixing of iodine with salt does not impart any colour, taste or odour to the salt
- Irrespective of economic status, all the population universally consume salt in a fairly uniform quantity daily
- As production of salt is limited to a few centres, monitoring of the production, supply and quality of iodised salt is relatively less cumbersome to any other method of iodine supplementation

National Goitre Control Programme

Government of India launched National Goitre Control Programme (NGCP) in 1962 whereby it was decided to supply iodised salt for human consumption to identified, "Goitre endemic" areas like Sub-Himalayan Region. The production of iodised salt was restricted to only three different plants under Public Sector/Government at Sambhar Lake in Rajasthan, Howrah in West Bengal and Kharagoda in Gujarat. The program was implemented by Directorate General of Health Services of the Ministry of Health in collaboration with Salt Commissioner. The programme was restructured in 1984, following the recommendations of Central Council of Health and Family Welfare and the Government took a policy decision to iodise the entire edible salt in the country in a phased manner by 1992. Two of the major policy decisions taken were:

 Salt Department, (under Ministry of Commerce & Industry, Government of India,) was identified as the nodal agency to monitor the Production and Quality Control of Iodised



Salt at Production Sources and Distribution of Iodised Salt in the entire country

Private Sector were permitted to manufacture commercial production of Iodised Salt

The programme commenced in April 1986 in a phased manner.

National Iodine Deficiency Disorders Control Programme (NIDDCP)

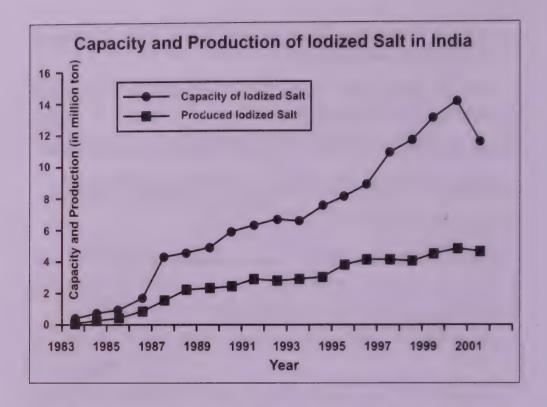
In August, 1992, the NGCP was renamed as NIDDCP with a view to cover a wide spectrum of Iodine Deficiency Disorders. The following are the objectives of NIDDCP

- To carry out surveys to assess the magnitude of the IDDs
- To produce and supply iodised salt in place of common salt
- To resurvey after every five years to assess the extent of IDDs and the impact of iodised salt
- To install Laboratories for monitoring of iodised salt and urinary iodine excretion (UIE)
- · To provide health education

Salt Department's Role & Universal Salt Iodisation

Over the last two decades various measures had been taken by Salt Department and tremendous progress has been made as far as creation of iodisation capacity, production and supply of iodised salt:

• The production of iodised salt, which was just about 300,000 tons in 1985, has reached about 4.2 million tons in 2003, whereas the total requirement of edible salt for human consumption is about 5.0 million tons.

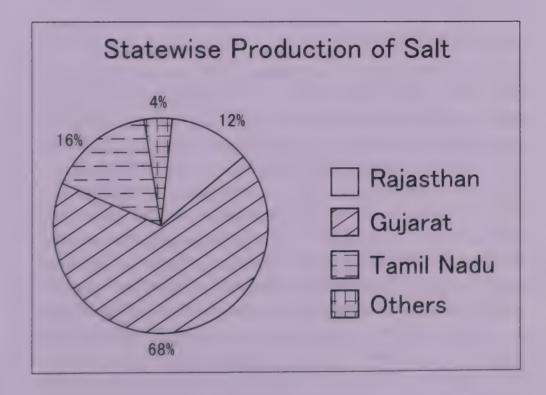


- More than adequate capacity for salt iodisation has already been created in the country to the tune of 12.3 million tons (from 859 units) which includes a capacity of 3.7 million tons of Refined Iodised Free Flow Salt/ Vacuum Evaporated Iodised salt (from 40 refineries)
- About 75 to 80 per cent of the population have access to iodised salt as revealed from the actual supplies of about 3.9 million tones of iodised salt during 2003.

Production of Iodised Salt

The Salt Department facilitates establishment of Salt Iodisation Plants and Refineries by providing technical knowledge. Commercial manufacture of iodised salt is recognized by registering the units after field inspection to ensure that the plants are installed as per approved design for production of iodised salt. Small Scale Manufacturers were facilitated to join the mainstream. UNICEF gave financial assistance to Small Scale Salt Manufacturers for forty salt iodisation plants

and provided potassium iodate free of cost. The External Evaluation of the status of the NIDDCP (1996) conducted by the Canadian International Development Agency (CIDA) has remarked that India has offered to the world two programmatic technologies: iodizing machinery and the spot testing kit which are important tools for producing good quality iodised salt. Till 1992, to encourage the massive salt iodisation program, the iodizing chemical-potassium iodate was subsidized by cash or in kind. Similarly registration for Salt Washeries / Refineries are accorded by Salt Department. The production of Refined Salt during 2002 was 1.3 r. illion tons, a little less than one-third of the total production. More than 35 per cent of the iodised salt produced is marketed in small packing of 1 or ½ kg. This enables better retention of jodine in the salt and also shows the increasing consumer preference for consumer packs and switch over from traditional purchase practices.



Distribution of lodised Salt

Salt Commissioner, in coordination with Railways, draws up a programme called, "Zonal Scheme" every year for distribution of Iodised Salt by Rail to all parts of the country. As an incentive for jodised salt manufacturers, preference in traffic under 'B Priority' is accorded to iodised salt and under 'C Priority' to Refined Salt. The objective is to ensure equitable distribution in all parts of the country and timely movement without any scarcity of the essential commodity, Salt. About 70 per cent of the total supplies of iodised salt for human consumption is by rail and the rest is by road. The Salt Commissioner, from time to time, keeps a close watch on the movement and requirement pattern and schedules the transportation programme accordingly throughout the year. No scarcity of salt is reported from anywhere in the recent past which shows the effective monitoring of the distribution by the Salt Department.

Quality Monitoring

A total of 26 Salt Testing Laboratories are established at production centres. Field officials regularly visit the iodisation plants, railway loading stations and ports for drawal of iodised salt samples at the time of production, from the stock and at the time of loading. While they carry out on-the-spottests by use of Field Test Kit, the samples are also analysed at the Departmental Salt Test Laboratories. The results are communicated to the concerned manufacturers for implementing the appropriate corrective measures. The field officials at the time of their visits also check the records maintained by the manufacturer regarding laboratory results recorded by them, procurement of potassium jodate, etc. In case of repeated defaults, penal action is also resorted to in the form of deduction of wagon quota for movement by rail, suspension and cancellation of the registration for commercial manufacture of iodised salt. They also check



whether the manufacturer complies with the statutory labeling and packing standards for edible salt.



In addition, nine Mobile Salt Test Laboratories have also been deployed at important production centres in various States for on the spot analysis of iodised salt. This helps in keeping a strict vigil on production and supply of iodised salt at the Plant site as well as at loading stations. Performance reports are issued to the manufacturers immediately advising them for improvement of quality wherever necessary. Mobile laboratories are also used for advocacy purposes viz., distribution of posters, placards, booklets on IDDs and other publicity materials. They are also used for Situation Analysis Studies in various districts on quality, availability and price of iodised salt and also to assess the awareness levels.

On an average about 90,000 samples are drawn and analysed at these laboratories and as many as twice that are tested by Spot Test Kit. About 62% of samples were found to be adequately iodised. This is corroborated further from the



results of the National Family Health Survey (NFHS-II, 1998–99) which indicates that about fortynine per cent of the population is consuming adequately iodised salt and that seventy percent is consuming iodised salt. Management Information System (MIS) Reports on Quality of Iodised Salt available at consuming states, received from fourteen States reveal that about eighty—one per cent of the samples tested had adequate iodine during 2003.

Govt. of India - UNICEF Activities

Salt Department with financial support from UNICEF organized various activities since the last decade for

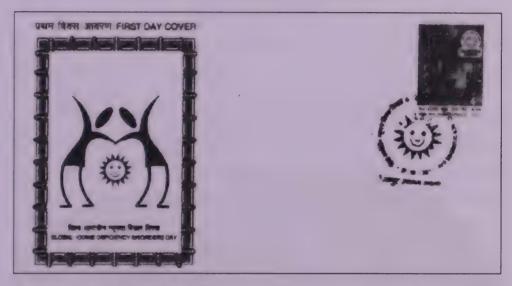
- Creating awareness amongst the public on IDD and benefits of iodised salt through rallies, human chain, national / state level seminars/workshops, observance of Global IDD Day on 21st October every year.
- Publication of books/ pamphlets/video-films/brochures/ release of full page supplements in leading regional/ national dailies/ printing of 'Sun' logo on postal stationery.
- Undertaking studies for assessing awareness levels, situational analysis of availability, quality and price of salt, census of salt manufacturing units/iodisation units, national multicentric study on monitoring quality of iodised salt through networking of medical colleges in Southern States, Knowledge, Attitude and Practice (KAPB) Studies etc.
- Organisation of national/ regional/ state level meetings of all stakeholders of NIDDCP to solicit their cooperation.
- Sensitisation/ Advocacy meetings with salt manufacturers
 & traders.
- Strengthening quality monitoring system at production sources through training of Quality Control Personnel of Salt Department and Industry, distribution of field test



kits, deployment of Mobile Salt Test Laboratories at major production centres.

• Evaluation of Universal Salt Iodisation (USI) (in India 1997-98).

The progress achieved on Universal Salt Iodisation (USI) over the last two decades was possible because of these various Information, Education, Communication (IEC) activities undertaken by the Department which caused increase in production and consumption of iodised salt in the country.



Facsimile of a First Day Cover and Cancellation on the eve of IDD day - 21st October, 2002

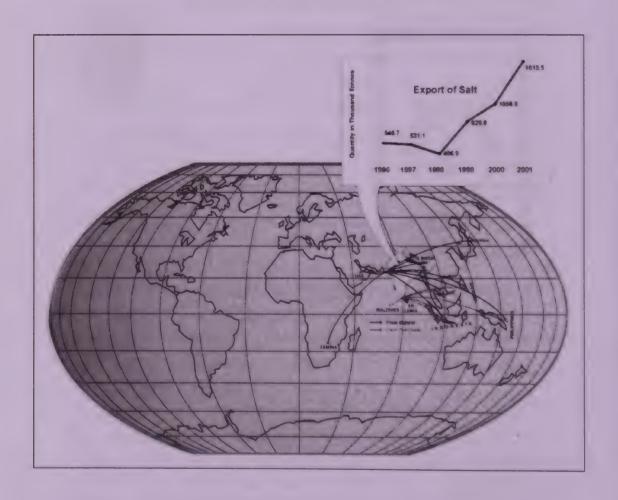
(Under the auspices of Govt. of India, Ministry of Communications at a special function held at Vigyan Bhawan, New Delhi)

Goal of USI - Bridging the Gap

The Government's Goal of NIDDCP is to reduce the prevalence of IDDs below ten percent in the entire country by 2010 A.D. A total of 20–25 per cent of the population is still to be provided access to iodised salt. Further, the iodised salt consumed by everyone should be adequately iodised. Iodised salt manufacturers and traders shoulder great

responsibility in ensuring the quality of iodised salt before supplying it to masses. As the nodal agency, the Salt Department's role is pivotal and crucial for not only achieving the Universal Salt Iodisation and consumption but also for sustaining the progress achieved. The Salt Commissionerate is thus playing a coordinating role involving all the stakeholders and is making sustained efforts for ensuring their unstinted cooperation and commitment for effective implementation of NIDDCP.

Shri S. Sundaresan is the Salt Commissioner, Government of India, Ministry of Commerce & Industry



National Iodine Deficiency Disorders Control Programme (NIDDCP)

Introduction

This programme was initially named as National Goitre Control Programme (NGCP) in 1962. However, in 1992 it was renamed as NIDDCP to give due importance to the spectrum of physical and mental disorders caused due to iodine deficiency affecting all stages of human growth and development.

The Tenth Five Year Plan (2002-2007) Goals are to:

- i. Achieve universal access to iodised salt.
- ii. Generate district-wise data on iodised salt consumption.
- iii. Reduction in the iodine deficiency disorders (IDD) prevalence in the country to less than 10% by 2010.

National Iodine Deficiency Disorders Control Programme (NIDDCP)

Objectives:

The main objectives of the programme are:

- i. Baseline surveys to assess the magnitude of iodine deficiency disorders in the districts
- ii. To supply iodised salt in place of non-iodised salt
- iii. To resurvey the districts after every five years to assess the prevalence of iodine deficiency disorders and impact of universal consumption of iodised salt
- iv. Monitoring of iodine content of salt and urinary iodine excretion levels in the population
- v. Nutrition and health education to improve the universal consumption of iodized salt

The goal of NIDDCP is universal iodisation of salt for human consumption so as to reduce the prevalence of IDD below 10% in endemic districts of the country.

Beneficiaries and Services

The programme covers the entire population of the country.

Implementation

The Directorate General of Health Services (DGHS) of the Ministry of Health and Family Welfare, Government of India is the nodal agency for policy decisions on the NIDDCP.

The Salt Commissioner's Office under the Ministry of Industry is responsible for monitoring the production and distribution of iodised salt to all the States and Union Territories. The Salt Commissioner, in consultation with the Ministry of Railways, arranges for movement of iodised salt from the production sites to the States and Union Territories on a priority basis.



The important activities being undertaken by the NIDDCP are:

Directorate General of Health Services (DGHS)

- i. Technical guidance on NIDDCP to States and Union Territories
- ii. Undertaking independent IDD surveys in the States and Union Territories
- iii. Imparting training in IDD to the State health personnel
- iv. Collection, compilation and analysis of relevant data on IDD from the States
- v. Monitoring the distribution of iodized salt at consumer level through the State Health Directorate/State Prevention of Food Adulteration (PFA) Authority

DGHS/ Salt Commissioner/ Department of Women and Child Development (DWCD)

- i. Intersectoral coordination and maintenance of close liaison with the Ministry of Industries, Railways, Information Broadcasting, Department of Women & Child Development, and various stake holders of NIDDCP in the States and Union Territories.
- ii. Monitoring the quality of iodised salt at the production level in collaboration with the office of the Salt Commissioner.
- iii. IEC activities to generate awareness about IDD in the country.

Current status

Available data suggest that there has been substantial increase in the availability and consumption of iodised salt during the 1990s. The National Family Health Survey - 2

(NFHS-2) survey (1998-99) showed that 49 per cent of households use iodised cooking salt at the recommended level of 15 parts per million (ppm) or more, whereas 22 per cent use salt containing less than 15 ppm of iodine. Twenty nine per cent of the households use salt that is not iodised at all. The survey also reports that the low income group has the lowest percentage of population consuming adequately iodised salt. The recent Reproductive and Child Health (RCH) surveys (2002-2003) have reported a significant decline in the consumption of adequately iodised salt.

The data from NFHS – 2 shows that in coastal States like Tamil Nadu, Andhra Pradesh, Kerala, and Gujarat, the percentage of households consuming adequate iodised salt is much lower than in many of the northern States. One of the reasons could be that the salt transported by road is not subject to any kind of quality control regarding iodisation. This loophole in the law makes it possible for transport of non-iodised salt by road to areas even beyond 500 km. Therefore, these States have ready access to non-iodised salt.

IDD Programme Status in India

State/	Total	Total	Endemic	Ban	IDD
UT	Districts	surveyed		Status	Cell
Andhra Pradesh	23	10	9	Complete	Yes
Arunachal Pradesh	10	10	10	Complete	Yes
Assam	23	18	18	Complete	Yes
Bihar	37	13	13	Complete	Yes
Chhatisgarh	16	2	2	Complete	No
Goa	2	2	2	Complete	Yes
Gujarat	25	16	8	No Ban	Yes
Haryana	19	10	9	Complete	Yes
Himachal Pradesh	12	10	10	Complete	Yes
Jammu & Kashmir	15	14	11	Complete	Yes

Jharkhand	18	9	8	Complete	No
Karnataka	27	17	6	Complete	Yes
Kerala	14	14	11	No Ban	Yes
Madhya Pradesh	45	14	14	Complete	Yes
Maharashtra	35	29	21	Partial	Yes
Manipur	9	8	8	Complete	Yes
Meghalaya	7	2	2	Complete	Yes
Mizoram	8	4	4	Complete	Yes
Nagaland	8	7	7	Complete	Yes
Orissa	30	4	4	Complete	Yes
Punjab	17	3	3	Complete	Yes
Rajasthan	31	3	. 3	Complete	Yes
Sikkim	4	4	4	Complete	Yes
Tamil Nadu	29	12	12	Complete	Yes
Tripura	4	3	3	Complete	Yes
Uttar Pradesh	71	25	20	Complete	Yes
Uttaranchal	13	9	9	Complete	Yes
West Bengal	18	5	5	Complete	Yes
A & N Islands	2	2	2	Complete	Yes
Chandigarh	1	1 .	1	Complete	Yes
Daman & Diu	-1	1	1	Complete	Yes
D & N Haveli	1	1	1	Complete	Yes
NCT Delhi	1	1	1	Complete	Yes
Lakshwadeep	17	1	1	Complete	No
Pondicherry	4	4	4	Complete	No
Total	587	283	247		

Source: Directorate General of Health Services, Ministry of Health & Family Welfare, 2000

Progress Towards Sustainable Elimination of IDD

Monitoring and Verification

The insistence on sustainability is not a trivial concern. The spectacular success in eradicating small pox is frequently taken as a model for the IDD elimination campaign but these two public health menaces represent fundamentally different problems. A virus caused smallpox and once the virus was killed the possibility of the recurrence of the disease ended. Iodine deficiency, on the other hand, is not caused by a single etiologic vector but is a condition similar to poverty, crime and hunger, and can only be controlled, not eradicated. Thus, to have sustainable elimination of iodine deficiency, a country must have a programme that will endure long beyond the initial achievement of iodine sufficiency.

Several historical examples justify this concern for sustainability: for example, in Latin America, where a long experience with iodine prophylaxis programmes has provided enough time to document their frequent failure: for instance, initially successful efforts in Guatemala, Colombia and Thailand later lapsed, in each case because of complacence, lack of vigilance and monitoring. We must keep the added requirement of sustainability firmly in view. Otherwise, the effort will consume an enormous expenditure of resources and time, to achieve only a temporary reprieve from the ravages of iodine deficiency.

In relation to sustainability two key issues deserve consideration:

- 1. What criteria can a country use to verify that it has achieved virtual elimination of IDD? and
- 2. How can a country ensure that this elimination, once achieved, will be sustained?

To address these questions, several international groups are collectively considering criteria for assessing the progress towards IDD elimination. The following guidelines have been proposed by ICCIDD, in consultation with many experts from countries and international agencies.

Proposed Guidelines for Tracking Progress Towards Elimination of IDD

A country with universal neonatal screening, preferably by TSH in a sufficiently sensitive assay, may be declared free of iodine deficiency if less than 0.3% of neonates need to be recalled for suspicion of congenital hypothyroidism. It is not necessary that any other criterion be established.

For countries where there is no universal screening of newborns, at least two of the following three criteria should be met to establish that sustainable elimination of iodine deficiency is being achieved.

- 1. All salt for human and animal consumption in all regions where IDD is known or suspected, should be iodized at a reasonable level (usually 30–100 ppm) at the factory, so that representative salt samples obtained regularly from retail outlets, or preferably from homes, have iodine content at or above a level of 20 ppm in all regions.
- 2. Samples of urine obtained on a regular basis in a statistically valid mode should have a median iodine content of 100 µg/litre.
- 3. In regions where IDD is known or suspected, the prevalence of total goitre (i.e. grades 1 and 2, palpable plus visible) in representative surveys of children of school age (e.g., 8-10

years old) should be less than 5% as ascertained by competent observers and preferably confirmed by ultrasonography.

In addition to meeting two of the above three criteria, sustainability must be established according to the following guidelines, as applicable:

- 1. A National IDD Commission should be in operation with a responsibility for the continuous monitoring of the status of iodine deficiency and of the iodine content of salt, according to established criteria, including mandatory public reporting of IDD status at regular specified intervals (e.g. every three to five years) by designated units (e.g. the programme, the Ministry of Health) that are technically competent and adequately financed.
- 2. The government, the private sector and consumers should have a high awareness of iodine deficiency and be committed to its sustained elimination.
- 3. The salt industry should have the commitment, technical resources and responsibility (frequently mandated by legislation) to sustain effective iodisation of salt, including its production, distribution and financing including the consumer.
- 4. The supply of iodine for salt iodisation is assured either through private purchase by the salt manufacturers or through the government & the availability of foreign exchange.
- 5. The availability, relative cost and perceived health benefits of iodized salt should make consumers prefer it to the unionised product.
- 6. The IDD programme should have ready access to local or regional facilities to measure iodine levels in salt and to a central laboratory competent to measure urinary iodine or neonatal blood TSH concentrations, or both, at affordable rates.



Partnership of ICCIDD with BSG and other NGOs

Introduction

India has a vast network of Non Governmental Organisations (NGOs) which have over the years, established themselves as credible and committed partners for providing health and developmental inputs. Though most of the NGOs work independently, they have a loosely knit consortium at the state and national levels. Another voluntary agency which has a nationwide presence is the Bharat Scouts and Guides (BSG) – the Indian chapter of International Scouts and Guides. The activities of BSG are oriented towards inculcating the spirit of discipline and social commitment in the students and youth. Health related activities are a part of this activity. We decided to use these two channels (i.e. the NGO system & BSG) to collect information about iodised salt in various parts of India.

Mr. G. Saha took over as Director in the month of March 2002. ICCIDD reestablished contacts with BSG. As a result, Mrs. Pushpa Nadkarni, Joint Director actively participated in the one day "Sensitization Workshop' held at AIIMS jointly by UNICEF-ICCIDD-AIIMS on 16th March, 2002. Bharat Scouts and Guides put up a stall at the Workshop venue, highlighting the latest foray BSG has made into various developmental programmes in the country.

Milestones in the Annals of ICCIDD -BSG

Collaboration

ICCIDDD entered into a partnership with BSG in 1997 when a formal letter was addressed to the then Director of the BSG. Since then it has been a very successful partnership. The date wise table of the major milestones is summarized in the table 7 given below.

Milestones

MIIIESTOLIES					
No.	Date	Place	Event		
1.	27 May, 1997	New Delhi	Letter written by ICCIDD to the Director, BSG		
2.	October, 1997 to June, 1998	New Delhi	Information Collection about availability of Iodised Salt in India-Partnership of ICCIDD with BSG, VHAI and other National NGOs		
3	June 2002	New Delhi	Presentation by ICCIDD to about 1000 Scouts and Guides and Rangers and Rovers and officials assembled for the President's rally at Delhi Cantonment		
4.	15thJuly, 2002	New Delhi	Meeting with Mr. G. Saha, Director, BSG		
5.	28th July, 2002	Ambala, Haryana	Presentations and distribution of prepaid envelops for sending 20 grams of salt sample, by ICCIDD, to about 300 Scouts and Guides from 18 States at the rally		
6.	26th to 28th September, 2002	Pachmarhi Madhya Pradesh	Various Information, Education and Communication (IEC) and training activities by ICCIDD for about 125 senior members of the Bharat Scouts and Guides.		



7.	18-22,	Gadpura,	ICCIDD conducts a module on
	October, 2002	Haryana	IDDE programme at National Community Leaders Training Programme of BSG
8.	27th October to 1st November, 2002	Raipur, Madhya Pradesh	ICCIDD put up an exhibition—cum—demonstration stall. Presentations were made. About 3000 tribal Scouts &
9.	8th June, 2003 to 12th June, 2003	Pachmarhi, Madhya Pradesh	Guides participated at the rally Various IEC and training activities by ICCIDD for about 550 BSG members from all over India who assembled for several training camps
10.	7th October, 2003	New Delhi	ICCIDD members train about 100 Teachers (Scout Masters and Guide Captains) of BSG
11.	20th October, 2003	New Delhi	Compilation of Results of Salt Testing and Experience Sharing by Teachers and Students

National level salt sample collection and analysis by titration and salt testing kit method for availability of iodized salt in India, October 1997 to June 1998

Objective

To collect information about iodised salt availability, pricing and its use from all the districts of the country.

Study Period: October 1997 - June 1998

Methodology:

The NGOs were identified by two methods:

i. Voluntary Health Association of India (VHAI) was asked to provide a list of NGOs through their state chapters

- ii. The District Commissioner of each district (District is the administrative unit in the country and the Commissioner is the administrative head) were requested to provide names of two NGOs from their district who were willing to work in this field.
- iii. Similarly, all Bharat Scouts and Guides District Commissioners were also requested to inform their district people for collection and dispatch of salt samples.

All the NGOs and the District Commissioners of the 480 districts in the country were sent a letter seeking their cooperation in October, 1997. Booklets and pamphlets on IDD were also mailed to them. Each NGO selected was sent 10 prepaid self addressed envelopes which contained a zip lock polythene bag for sending the salt sample from the field site to ICCIDD office and laboratory in Delhi, NGOs desirous of having more samples were sent more envelopes. The NGOs were requested to send from each district of the state a total of 20 salt samples from retail shop. Of these, 10 were to be from urban areas and 10 from rural areas. All NGOs were also sent iodised salt Spot Testing Kits so that the results were also known to them. They could use this information to organise and plan any community education activity. The salt samples received in Delhi office were quantitatively tested for iodine content by the titration method.

We derived a list of 147 NGOs to participate in this study. Likewise, we sent 45 letters requesting Bharat Scouts and Guides and response was received from 39 Units of Bharat Scouts and Guides.

Results:

A total of 80 NGOs from different States and 39 subunits of Bharat Scouts and Guides participated in this study.



They are listed below.

State wise distribution of participating NGOs and BSG units

Otato	Wide distribution of	particip	during 14003 and D30 units
S.No.	State	NGOs	Bharat Scouts and Guides
1.	Andaman Nicobar	2	3
2.	Arunachal Pradesh	Nil	Nil
3.	Assam	10	Nil
4.	Andhra Pradesh	6	4
5.	Bihar	4	1
6.	Delhi	10	Nil
7.	Goa	3	Nil
8.	Haryana	7	3
9.	Himachal Pradesh	3	Nil
10.	Karnataka	3	2
11.	Madhya Pradesh	3	6 (MPR*)
12.	Maharashtra	8	11 (BR** + B***)
13.	Meghalaya	1	Nil
14.	Mizoram	Nil	Nil
15.	Orissa	4	2
16.	Punjab	5	1
17.	Sikkim	1	Nil
18.	Tamil Nadu	4	Nil
19.	Tripura	1	Nil
20.	Uttar Pradesh	2	Nil
21.	West Bengal	3	6
	TOTAL	80	39
	t Destart Dellares		au Dailmana *** Damban

^{*} Madhya Pradesh Railways, ** Bombay Railways, *** Bombay

80 NGOs sent a total of 1539 samples and 39 units from Bharat Scouts and Guides sent 562 samples to the Delhi office in the month of November 1997 to March 1998. The details of "Procedure Followed and Responses Received" are given in Table-9. The iodine content in the salt samples was measured by kit method and titration method. The details of the data on content of iodine in the samples are given in annexures 3 & 4.

Details of the Procedure Followed and Responses Received

No.	Details	Bharat Scouts	NGOs
1.	Request letter for participation sent to	45 units	480 Districts
2.	Response received	243 sub-units	86 NGO's
3.	Samples received	39 units	80 NGO's
4.	Total sample received from Nov. to Jan.	562 samples	1539 samples
5.	Analysis by titration	84 samples	791 samples

Salt Testing Kit Method

- 1. A total of 971 (254+717) i.e. 63% samples from NGOs out of 1539 salt samples tested adequate i.e. iodine equal to or more than 15 ppm, for iodine content by the kit.
- 2. A total of 314 (138+176) i.e. 55.87% samples from BSG out of 562 salt samples tested adequate i.e. iodine equal to or more than 15 ppm, for iodine content by the kit.

Salt Testing Kit Method

lodine content (ppm)	No. of Salt Samples from NGOs	No. of Salt Samples from BSG
0 PPM	260	166
7 PPM	308	82
15 PPM	254	138
30 PPM	717	176
Total	1539(100%)	562(100%)

Titration Method

Of the 1539 salt samples from NGOs received at Delhi office, only 791 samples had sufficient quantity for analysis by



titration method. Similarly, of the 562 salt samples from Bharat Scouts received at Delhi office, only 84 samples had sufficient quantity for analysis by titration method.

Iodine Content: Titration method

Iodine Content (ppm)	No of Samples from NGOs	No of Samples from BSG
0 ppm	74 (9.35%)	1 (1.19%)
0 - 7 ppm	82 (10.36%)	3 (3.57%)
7 – 15 ppm	173 (21.87%)	16 (19.04%)
15 - 30 ppm	207 (26.16%)	17 (20.23%)
30 + ppm	255 (32.23%)	47 (55.95%)
Total	562 (100%)	84 (100%)

Conclusions

The objective of this project was to collect information about iodised salt availability, pricing and its use from all the districts of the country. The Bharat Scouts and Guides were requested to inform their District people for collection and dispatch of salt samples to CCM, AIIMS, Delhi. The salt samples were tested by two methods i.e. Spot Testing Kit and Titration Method.

- 1. Partnership between ICCIDD and Bharat Scouts and Guides
 - i. Salt Testing Kit method: A total of 314 (55.87%) samples out of 562 salt samples tested adequate i.e. iodine equal to or more than 15 parts per million (ppm).
 - ii. Titration method: A total of 84 samples were sufficient for Titration method. Sixty-four samples (80%) samples were more than 15 ppm, the recommended level at consumption point.

- 2. Partnership between International Council for Control of Iodine Deficiency Disorders (ICCIDD)-Voluntary Health Association of India (VHAI)-National NGOs:
 - i. Salt Testing Kit Method: A total of 971 (63%) samples out of 1539 salt samples tested were adequate i.e. iodine equal to or more than 15 ppm.
 - ii. Titration method: Only 791 samples of the 1539 salt samples received at Delhi office had sufficient quantity for analysis by titration method. More than 58 % (462) samples had iodine more than 15 ppm.
- 3. Partnership with the NGOs to collect data regarding iodised salt is feasible.
- 4. Our preliminary reports indicate that about 58% 84% of the salt samples at retail level contain adequate iodine.
- 5. We will be making special efforts to contact the non responders. This partnership needs to be strengthened and enlarged so that a nationally representative sample is used for estimation of availability of iodised salt at retail and household levels.

Rally at Delhi Cantonment: June, 2002

Presentation by ICCIDD to about 1000 Scouts and Guides assembled for the President's Rally at Delhi Cantonment

About 1000 Scouts and Guides from all over the country assembled in the capital for The President's Rally scheduled on 5th June, 2002 at New Delhi. The Scouts and Guides, and Rangers and Rovers – in the age group of 14 to 18, assembled in Delhi on 1st June 2002. The Scouts and Guides leadership responded to ICCIDD requests and readily invited our team to make a presentation and interact with the children as well as the Scouts Masters and other teachers accompanying the children from all States on Sunday, the 2nd June, 2002.

ICCIDD team visited the camp at Central School at Delhi Cantonment and made the presentation to the group. It was a close interactive session that elicited a number of questions from the audience, especially the children.

Meeting with Mr. G. Saha, Director, BSG: 15th July, 2002

The meeting of the ICCIDD Team and Mr. G. Saha, the Director BSG, took place at their National Headquarters (Lakshmi Majundar Bhawan, I.P.Estate, New Delhi) on 15th July, 2002. Mrs. Pushpa Nadkarni, Joint Director also attended the meeting. The broad agenda for the meeting was:

- 1. Recall of past association with Scouts and Guides
- 2. Proposal for future collaboration on an ongoing basis
 - i. Participation in BSG Camps
 - ii. Distribution of promotional materials as part of awareness campaign through the Bharat Scouts and Guides network
 - iii. Conducting Information, Education and Communication (IEC) programmes at national and state events
 - iv. Dedicated programme in October 2002 'IDD Month'
 - v. International event in Thailand in December 2002

Rally at Ambala City, Haryana, 28th July, 2002

Presentations by ICCIDD for about 300 Scouts and Guides from 18 States

Following our meeting and discussions with Mr. G. Saha, National Director, Bharat Scouts and Guides on 15th July, 2002 at the National Headquarters in New Delhi, BSG invited ICCIDD to join the Scouts and Guides Camp at Ambala City in the State of Haryana. This camp was specially organized for the Award Winners of all President's Scouts and Guides

of India. Thus, some of the participants were those who have completed their school and college education. There were 300 participants representing 18 States.

ICCIDD members were called to make two presentations one in the forenoon and the other in afternoon. The valedictory function was held in the afternoon. Civic officials, educationists, district administration representatives and others were invited.

The session with the camp participants was interactive in nature. The standard ICCIDD presentation was shared. It was apparent that the students already had information about IDD.

During the interactions with officials, ICCIDD members were invited to conduct educational awareness programmes in various states. Mr. Samir Choudhury, Joint Director (in charge) Training Centre, Pachmarhi, Madhya Pradesh suggested ICCIDD to visit the Centre in Pachmarhi, Madhya Pradesh during various training programmes, especially 'Training of Trainers' programmes.

Mr. G. Saha, National Director was present at Ambala. He suggested that BSG and ICCIDD jointly work out a year long programme and agreed to coordinate centrally for ICCIDD members visit to various states as well as national programmes.

Each participant student was given the prepaid envelop for sending 20 grams of salt sample to ICCIDD for analysis. The format for reporting the sample and ICCIDD letter were given. Testing of three samples of salt for iodine presence/absence was also demonstrated. This generated interest in the children and they wanted to do this at their locations.

Thereafter, Mr. Saha spoke to the gathering and guided them on how to spread the message at their sorroundings for creating awareness on the need for consumption of iodised salt. 'Word of Mouth' was suggested as one of the methods for communication.



Pachmarhi, Madhya Pradesh: 26th to 28th September, 2002

Information, Education and Communication (IEC) and Training Activities by ICCIDD for about 125 senior members of BSG at National Training Centre, Pachmarhi, Madhya Pradesh

Background: As part of the ongoing programmes with Bharat Scouts and Guides, ICCIDD were invited to conduct a session on IDD Elimination on 27th September, 2002. The occasion was a training programme on "Modular Training" for senior trainers with participation from all States.

National Training Centre, Pachmarhi: Two Programmes, viz. Course for Assistant Leader Trainers (ALT) and Rover/Ranger Samagam were held at the National Training Centre. A two member team from ICCIDD spent a week during these programmes and held various IEC and training activities with the participants.

Attendance: ICCIDD presentations were started from 28th September at 8.30 am, the penultimate day of the training programme. Participants of a programme at the National Adventure Institute (NAI) were also trained at this session. In all, there were 125 participants.

Participants' Profile: The participants were seniors belonging to different walks of life, some in active service, some retired, and all engaged in various socially relevant activities, besides the BSG full-timers.

The Module: After the introductory, the documentary on IDD- 'Trishna' was exhibited, followed by a Power Point Presentation and interactive sessions. The message was well received. Resolve was evident on all faces to join hands to carry ahead the programme.

Outcome: In the evening at the time of the traditional camp fire they took a pledge to collaborate in the fight for elimination of Iodine Deficiency Disorders. Participants from all States requested for a copy of Trishna (a documentary on IDD), IEC materials and salt testing kits. They were informed that in a phased manner, all the States would get the requisite materials, starting with 19 States. It was mentioned that after the successful programmes for Leprosy Eradication and Oral Rehydration Therapy, Iodine Deficiency Disorders Elimination will be the next programme of that magnitude.

Gadpura, Haryana: 18th to 22nd October, 2002 National Community Leaders Training Programme was conducted at a location 10 kilometers away from Ballabgarh in Gadpura, Haryana from 18–22 October, 2002. ICCIDD was invited to conduct a module on IDDE programme at this event.

Raipur: 27th October to 1st November, 2002 ICCIDD put up an exhibition-cum-demonstration stall for about 3000 tribal Scouts and Guides at the national rally A national rally of 3000 tribal Scouts and Guides was held from 27th October to 1st November, 2002. ICCIDD was invited to put up an exhibition-cum-demonstration stall. ICCIDD Representative stayed with the participants in the Camp for two days and interacted widely. With them it was discussed that ICCIDD will train a team of Scouts and Guides who will, thereafter, do the demonstrations.

Pachmarhi, Madhya Pradesh: 8th June to 12th June 2003

Various IEC and training activities by ICCIDD for about 550 BSG members from all over India who assembled for several training camps

Situated at an altitude of 1067 meters and surrounded by the profuse greenery of the hills and tranquil forest glades, Pachmarhi is also called "Queen of Satpura". It is situated in Madhya Pradesh. It has a place of eminence in the Scouting and Guiding Movement too as it houses the National Training Centre—a temple of learning for the trainees.

Training Programmes: The Training Centre conducts several Training Courses all round the year. Courses for Leader Trainers, Assistant Leader Trainers, Pre Assistant Leader Trainers, Himalaya Wood Badge Courses, Reorientation Courses for Trainers, Courses for Commissioners and other specialized courses and workshops are conducted.

The triennial meet of trainers: "Sandhan" is held here. Gathering of Rovers and Rangers - "Samagam" and standard Judging Competitions are also held. The centre has competent Training Staff who are functioning under the leadership of the Deputy Directors of Training of both the wings i.e., Scouts and Guides respectively.

National Adventure Institute: In order to offer more opportunities to young people, not only to the members of BSG, but also to the young non-members, BSG started the National Adventure Institute in 1992. The then National Commissioner, Shri V. P. Deendayalu Naidu laid the Foundation Stone.

This has opened avenues to youth to enjoy nature through adventure activities, living in the open air, trekking, rock climbing, night scouting, etc. This Institute is growing day by day in strength and popularity. It has now been brought on

the tourist map of the Tourism Departments of the Madhya Pradesh Government.

Youths from all corners of the country have been exposed to the activities. Thousands of youths have so far participated in adventure programmes. This institute celebrates its anniversary on 9th May. SAARC (South Asia Association for Regional Co-operation comprising of countries India, Pakistan, Sri Lanka, Nepal, Bhutan, Bangladesh, Maldives). Adventure Programme was conducted in Nov. – 1997, and another International Adventure Programme took place in February 2000. Many other International events are being organized. Many countries have been taking keen interest in this National Adventure institute programmes.

Rationale of the visit: In the various conferences and workshops in the recent past, an increasing need was felt for incorporating various groups into the NGO network and consolidating the existing ones. This was highlighted prominently in all the regional workshops on "Annotated Bibliography" for sustaining the Iodine Deficiency Disorders Elimination Programme. Consistent recommendations were made on the role of civil society. It could be testified from later experiences that a Programme like IDDE, mostly planned and implemented by public health professionals, can be effectively supported by other systems of network. In order to do this ICCIDD entered into partnership with the Bharat Scouts and Guides with a national networking of students, numbering four million approximately.

By regular interaction with BSG, the message is spread far and wide through school children as also BSG officials. The present Director Mr. D. L. Sharma is an enthusiastic promoter of this collaborative programme. He sees it as a great opportunity for both ICCIDD and BSG to contribute together to the national development.

Dates of visit: 8th June 2003 to 12th June 2003.

Journey: The team traveled to Bhopal from New Delhi by Shatabdi express and from Bhopal to Pachmarhi by road. The journey from New Delhi to Bhopal was for eight hours and the journey from Bhopal to Pachmarhi was for five hours. Same route and mode of transport was used for the return journey.

Programme: The team from the ICCIDD was scheduled to interact with the members of the Bharat Scouts and Guides attending the following four camps during the period of the visit to Pachmarhi, Madhya Pradesh.

Camps of BSG at National Training Centre

No.	Camp	Dates
1.	The course for Assistant Leader Trainers (ALT) Scouts	1st June 2003 to 9th June 2003.
2.	National Adventure Programme	1st June,2003 to 10th June 2003
3.	Course for Assistant Leader Trainers(ALT) Guides	8th June 2003 to 14th June 2003
4.	Rover / Ranger Samagam	10th June 2003 to 15th June 2003

The participants:

The participants included the Joint Director (Scouts), Deputy Directors of the National Training Center, Pachmarhi, and their staff, Deputy Director of the National Adventure Institute, Pachmarhi, and their staff. The ALT camps were held for the teachers/ Scoutmasters from various parts of the country. The Scouts and Guides (age group 10–16yrs) and their teachers attended the Adventure programme. Rovers and Rangers (age group 16–25 yrs) attended the Samagam. The interactive sessions were separate for all the different camps.

Number of participants in several Camps of BSG

No.	Camp	No. of participants
1.	Assistant Leader Trainers, ALT (Scouts)	29
2.	National Adventure Programme	265
3.	Assistant Leader Trainers, ALT (Guides)	22
4.	Rovers / Rangers Samagam	229
5.	Total	545

The Module of Interaction included:

- 1. A brief Introduction of the ICCIDD and the team.
- 2. Screening of the film "Trishna" on Iodine Deficiency Disorders in India.
- 3. Over Head Projector presentation highlighting the important aspects of IDD and the role Bharat Scouts and Guides can play in the campaign against Iodine Deficiency Disorders in India.
- 4. Demonstrations of Iodine content of salt by Spot Testing Kits.
- 5. Question and answer session on the aspects discussed.
- 6. Exhibition of books and posters on Iodine deficiency disorders.

The Outcome:

The participants attended all the interactive sessions enthusiastically. At the end of the session all the participants appeared convinced regarding the spectrum of IDD and the importance of consumption of adequately iodized salt. They all pledged to spread the awareness and participate whole-heartedly in the campaign against IDD in the society.



Discussion with Mr. J. Sukumara, Joint Director of Scouts.

The Joint Director called on the team and discussed the aspect of involvement of the Bharat Scouts and Guides on a large scale in the elimination of Iodine Deficiency and monitoring iodine content in salt. He proposed to introduce "Proficiency Badge" on Iodine Deficiency Disorders elimination into the curriculum of the Scouts and Guides. This was done to ensure the participation of the Scouts and Guides energetically through out the country.

In the introduction of a "Proficiency Badge" the role of ICCIDD would be to prepare a syllabus that is objective, achievable and which can be evaluated.

In order to do this the ICCIDD should:

- 1. Recommend the symbol of the badge.
- 2. Print booklets of about 1 to 2 pages on the syllabus and the activities to earn the badge.
- 3. Devise an evaluation procedure.
- 4. Train the teachers who will then be able to guide their students to earn the badge.
- 5. Train the examiners for the evaluation of the badge examination.
- 6. Should supply the materials and equipment for the activities recommended in the syllabus.

The Scouts and Guides administration will-

- 1. Allow ICCIDD to participate in all the camps involving teachers and badge examiners for their training.
- 2. Will prepare and provide badges.

Recommendations

- 1. Strengthen the partnership with the Bharat Scouts and Guides by participating in their camps in future.
- 2. Consider the feasibility of introduction and support of the proficiency badge.
- 3. Supply student specific IEC material through BSG.

Training of Teachers, New Delhi 7th Oct., 2003 lodine Deficiency Disorders (IDD) Awareness 2003 – ICCIDD and Bharat Scouts and Guides jointly organized a one day programme on Tuesday 7th October 2003 in collaboration with Salt Commissioner, Government of India, Centre for Community Medicine (CCM), All India Institute of Medical Sciences, Pathfinders, UNICEF and the Micronutrient Initiative. The theme was "Iodine Deficiency Disorders (IDD) Awareness – 2003". Scout Masters and Guide Captains (Teachers), numbering about 100, from all over Delhi attended the programme. The inaugural session had eminent speakers from different organizations who shared their experiences in Iodine Deficiency Disorders Elimination Programmes. The components of this were broadly:

- Training of about 100 Teachers (Scout Masters and Guide Captains) on Tuesday, the 7th October, 2003
- Salt sample testing from 8th to 18th October and report compilation
- · Compilation of report on 20th October, 2003
- Media-exposure

The thrust of all these activities was to create mass awareness about iodine deficiency disorders and the importance of using iodized salt as well as garner support of policy leaders for a cause of national importance.

Venue: National Headquarters Bharat Scouts and Guides Lakshmi Mazumdar Bhawan, 16, Mahatma Gandhi Marg, I. P. Estate, New Delhi

Date: Tuesday, the 7th October, 2003

The inaugural session started with the Scouts' prayer. This was followed by the welcome address and theme setting by Prof. Chandrakant S. Pandav. He introduced the Chief Patron of ICCIDD – Mr. Mohan Dharia, former Deputy Chairman, Planning Commission, Government of India and a respected personality in both political and social services circles. Dr. Pandav paid homage to late Prof. V.Ramalingaswami known as the father of Iodine Deficiency Disorders Elimination (IDDE) Programmes in India and recalled his contributions and guidance he had from him as a student of medicine. He also highlighted the crucial role of each dignitary and institutional representative present there towards the success of the programme.

Mr. D. L. Sharma- Director, BSG enthusiastically welcomed the audience as a group who showed zeal to do something concrete for the country by contributing towards sustainable elimination of iodine deficiency disorders. He recalled that when a few years back, ICCIDD initiated a dialogue with BSG, there were doubts about the whole programme. These were cleared in the successive interactions with ICCIDD officials. He recalled the various programmes in which ICCIDD participated, especially at Pachmarhi, and at Raipur where more than 1400 tribal children from different parts of the country participated. Awareness was brought about through literature, slides, and presentations for three whole days. It was then that BSG decided to put this as the national project and associate in a larger way to bring awareness at grassroots level. He spoke to the audience about the importance and availability of iodine as a nutrient, the consequences of iodine deficiency, its role in brain development and the effect of IDD on the growth and development of the youth of the country. He then explained how the programme

schedule of the day would help to educate the BSG units and other members of Bharat Scouts and Guides.

Mr. S. Sundaresan. Salt commissioner, stated that salt has universal applicability. It is not merely a commodity. It has vast industrial applicability. Decades earlier, the British suppressed production of salt and levied duty in India and imported salt to the country. Today India ranks third in the production of salt in the world. Salt is produced in coastal districts of Guiarat, Tamil Nadu, and also in the interiors of Rajasthan. He stated that distribution is as important as production. So, the job of Salt Commissioner is to monitor production of salt and manufacture of iodized salt conforming to the required standards as well as to ensure its availability everywhere. The capacity for production and iodisation of salt is adequate. The country has all other resources required for the production of salt such as raw materials, iodizing chemical and transportation infrastructure - both rail and road. Bharat Scouts and Guides are one of the important stakeholders having a major role in achieving sustainable elimination of IDD.

Prof. M G Karmarkar talked about how the IDD elimination programme has passed through different stages and the difficulties encountered in its implementation over a period of 40 years. He requested the BSG to reach out at the grassroots level to educate the people about the consequences of IDD. He recalled the importance that salt has had in our country during the freedom struggle. Today we are using salt to prevent mental retardation as it is important to understand that we are focusing on prevention rather than cure. If adequate amount of iodine is not taken during pregnancy, it would result in irreparable damage. If one starts consuming iodized salt it will help in preventing many of these disorders in future life. He explained that Goitre is only the 'tip of iceberg'. There are many more serious forms of disorders caused by iodine deficiency. It is very important

that we make sure that adequately iodized salt is supplied to pregnant women and children. Therefore, it is necessary to have the universal programme.

Universal salt iodisation is very important for us. Teachers are effective communicators of this message. Teachers educate children and children in turn take this knowledge to their homes. He explained how conducting practical tests during the day for the teachers would help them to take it to the school environment and over a period of next 10 days to collect the salt samples from households. There are various types of salt, e.g. refined, packed, loose, crushed. crystal, rock salt. Consumers look for iodized salt in cities. He stated that when people hear of jodized salt what comes to their mind is 'refined, packed, expensive salt'. This is a wrong perception. In fact, salt can be iodized in various forms. He elaborated that people think that iodized salt is costly and unaffordable. Therefore, it is very important to communicate that any form of salt, which is adequately iodized, can be consumed. These simple messages are very important. He recalled the guestion that people often raise 'Why salt as a vehicle for iodine?' It is because this is only commodity, which is taken by old and young, rich and poor, in every part of the country. It is consumed in a fixed quantity every day. He concluded by saying that it is possible to reach everyone in our country with this message - "Iodine is one element, which has to be taken in the right amount everyday".

Dr. Eric Alain Ategbo, Project Officer, Nutrition, UNICEF-India, shared the role played by UNICEF at the global level. He made specific reference to the UNICEF programme in India. Way back in 1956, UNICEF contributed the first iodized plant located in Sambhar Lake, Rajasthan. He pointed out that even though technology is available, and it is simple, cheap and safe, it should be utilized judiciously. He reiterated that UNICEF is privileged to be a part of this important programme and that we should not look back but forward.

He recalled that the motto of Scouts and Guides is to protect the weak. He emphasized the need to give message to encourage school children to consume iodized salt and further spread this message. He said that joint efforts should be made to work for the elimination of IDD. UNICEF supports all programmes of this kind as it ensures the rights of our children. He concluded saying that it is our duty to help India for a brighter future.

Dr. R. Sankar, National Programme Officer of the Micronutrient Initiative, addressed the audience about the issue of IDD elimination and its sustenance. He said that the Micronutrient Initiative (MI) was set up to accelerate progress related to control of iodine, iron and vitamin A deficiencies. He emphasized that school is a platform where teachers educate the children and children educate their parents. Thus it is a powerful medium and has great potential. Through Scouts and Guides we can reach successfully at the grassroots level. He explained that MI is happy and privileged to collaborate with ICCIDD and BSG.

Mr. Mohan Dharia, in his Presidential address, emphasized the importance to eliminate all deficiencies in the country – illiteracy, poverty and malnutrition. He said that with hard work and determination we can achieve the goal of eliminating iodine deficiency disorders. He quoted the example of Kerala achieving 100% literacy rate. He shared how his doubt about the IDDE programme had now been cleared, after having understood its societal benefits. He assured his full support for the programme and was proud to be the Chief Patron of ICCIDD.

Mr. Mohan Dharia released the "20 Questions on IDD" in Hindi, which contains the general queries and information relating to iodine deficiency disorders.

Mr. L. M. Jain, (IAS, retd.) National Commissioner, Bharat Scouts and Guides (BSG), in his inaugural address shared the privilege of supporting the government programme and serving the people through BSG. Mr. Jain restated that BSG



is happy in collaborating with ICCIDD for elimination of Iodine Deficiency Disorders. It is something for the good of the entire people of the country. He recalled that he first learnt about IDD in Chandigarh, part of the sub-Himalayan terrain. in 1960 when iodized salt started appearing in the market. He said that the success of the programme and the various challenges give a feeling of involvement in a good public interest programme. He referred to Mr. Sundaresan's talk earlier when he said that the resources are there and it is possible to provide iodized salt to the whole population of the country. He pointed out some of the problems being faced by small scale manufacturers. He also shared the misplaced view of some sections of the people who think that any salt is good. It is in these places that the BSG plays an important role to make them understand in a nonaggressive, persuasive manner. He emphasized that at the end of the day, participants should give a feedback of whether they are convinced or not. The aim is to bring about awareness in all parts of the country and we should be able to lend a strong helping hand. Mr. Jain hoped that as a result of the collaboration between the ICCIDD and BSG, continued interactions between the groups will make the programme a success.

Dr. Chandrakant S. Pandav submitted the admission form for Fellowship of Bharat Scouts and Guides to the National Commissioner. While seeking admission, Dr. Pandav recalled with nostalgia his days as a pupil at the National Model School, Aga Khan Palace in Pune, where he was a Sea-Scout for many years. It was while imprisoned at Aga Khan Palace that Mahatma Gandhi gave the call in 1942 for 'Quit India'. Dr. Pandav remembered the call for freedom given by Mahatma Gandhi by picking up a fistful of salt from the beach of Dandi in Gujarat. He highlighted the present scenario by stating that today instead of salt we say iodized salt. Just as salt satyagraha was an important milestone in attaining freedom, similarly iodized salt gives freedom from mental retardation.

The Technical Session followed the Inaugural Session. In this session, the teachers were divided into two groups. All the teachers were given a set of 50 forms (retail shop), salt testing kit of 20 each, ten sets of '20 Questions' and a time table card with appropriate messages for each student. Prof. Karmarkar explained to the teachers the form and the use of salt testing kits. Modalities for collection of salt samples from households and retailers were explained as also how to guide the children in this exercise. In these sessions the teachers actively participated and clarified various doubts regarding salt testing kit, forms etc. Information, Education and Communications (IEC) material were displayed and distributed.

Mr. K. Sukumara, Joint Commissioner, Bharat Scouts and Guides, who resourcefully coordinated all the activities at the BSG Headquarters, concluded the programme by expressing hope this association would help in the elimination of iodine deficiency disorders.

Mrs. Saroja P., Joint Commissioner (Guides) extended a helping hand wherever and whenever needed especially for the hospitality and comforts of the participants. All Members of the ICCIDD team and professionals and staff of Bharat Scouts and Guides were actively involved in the conduct of the programme.

Compilation of Results, 20th October, 2003

Component: Compilation of Results of Salt Testing and Experience Sharing by Teachers and Students

Venue: National Headquarters, Bharat Scouts and Guides, I.P.Estate, New Delhi

Date: Monday, the 20th October, 2003



Background

As a prelude to Global IDD Day observance on the 21st October 2003, a joint programme was organized by BSG and ICCIDD on Tuesday, the 7th October 2003 at the National Headquarters of BSG in New Delhi.

Compilation of report

Large numbers of teachers who had participated in the training and orientation programme of 7th October, 2003 assembled at the National Headquarters of BSG on 20th October, 2003. They brought with them test results of more 55,000 samples. These samples were tested from 8th to 18th October, 2003. The details of samples collected is given in annexure 5.

The Survey conducted in Delhi included a total of 36 Schools in which 6,089 students participated. A total of 55,096 salt samples were tested. Among these salt samples, 47,753 (87%) tested positive in iodine content and 7,343 (13%) tested negative for iodine content.



A view of the audience at Inaugural Session of the training programme at BSG National HQ on 7th October, 2003

Salient Features of Survey Conducted by BSG in Delhi

No.	Particulars	Number
1.	No of participating schools	36
2.	No of participating students	6,089
3.	Total number of salt samples tested (by salt testing kit)	55,096 (100%)
4.	No of salt samples with Iodine	47,753 (87%)
5.	No of salt samples without Iodine	7,343 (13%)

Experience of Teachers and Students who went to test salt samples:

- 1. Some interesting experiences were observed amongst slum dwellers. When advantages of using iodised salt were explained to womenfolk and the salt tested from their household showed no iodine, these women immediately threw the salt stocks and purchased new salt, which showed presence of iodine.
- 2. Poor families purchased non-iodised salt for economic reasons.
- 3. Spurious products, fake packing, and surrogate selling of salt were evident.
- 4. Some families asked about other sources of iodine in natural form, e.g. seafood. These areas require proper educational and awareness programmes.
- 5. Since this was BSG coordinated programme, school managements were not directly involved. While there was support and encouragement, some Principals wanted more participation and involvement for better coordination.



- 6. Children and teachers wanted some incentives, e.g. "Certificate of Participation."
- 7. Teachers wanted the Principals to be told about their involvement as well as to be asked to support for continued work.
- 8. In many cases, samples were to be purchased. Reimbursing the cost thereof would encourage increased participation in future.
- 9. This one exercise has created and/or increased awareness and understanding of the programme among not only the pupils and educators, but also the public, especially the slum-dwellers.
- 10. Children's involvement motivated parents.
- 11. Participants want to continue it as an ongoing programme in collaboration with and support of ICCIDD & BSG.
- 12. In spite of constraints like teachers involvement in election related duties, children's half-yearly examinations, spread of dengue and festival season, the programme was a success and should continue.
- 13. In certain parts of Delhi, one specific brand of iodised salt is being used even though other brands were also available. Since this brand showed presence of iodine in all samples tested, some teachers felt that they were indirectly popularizing this particular brand.
- 14. Students who went to test salt samples faced certain problems. Some shopkeepers questioned whether they are authorized to do this testing and if so who authorized them. Certain shopkeepers went to the extent of telling them to mind their own business.
- 15. Some shopkeepers were not willing to give samples of salt from packed salt packets as they felt that once the packet is open, they would not be able to sell that packet.

IEC Programme

Conveying messages to the people at large in general and to the younger generations in particular is an important aspect of ICCIDD's IEC programmes. As part of this, Bharat Scouts and Guides and ICCIDD jointly brought out Wall Calendar – 2004. This calendar carries messages and explanatory notes conveying various features iodine deficiency disorders and its elimination.

THE BHARAT SCOUTS & GUIDES

1	शास-ज्येष्ट 20	61	2004	
2	9	16	23	W Co
3 Amesii	10	17 Talest	24 PRAT	ACA
4	11	18 ⁽¹⁾	25	1 6
5 26102	12	19	26	2 4 4
6 ^{'gara}	13	20	27	1
7 ****	14	21 *****	28	-
8 ====	15	22	29	1000
1 1	2	2 9 3 4 10 4 11 5 16 12 4 11 6 13 13 1	3 4 10 4 17 4 18 4 1 1	2 9 16 23 3 4555 10 455 17 40000 24 5074 4 11 6556 18 6550 25 505 5 5666 12 657 19 5070 26 5070 6 666 13 6570 20 5070 27 6570 7 5670 14 6570 21 5070 28 674

	JUN	IE		स्रो	V -41	W 20	61		2	004
SUN			6		13	,	20		27	
MON			7	u myst	14	6 134	21	APT	28	दशस
TUE	1	3000	8	a.v.	15	<i>ব্যাপ্তৰ</i> ণ	22	सन्ध	29	कारका द्वारका
WED	2	42-2.	9	rar	16	सङ्ग्र	23	0 好電	30	
THU	3	6	10	gent)	17	प्रकार व्यक्त	24	4/4 .		
FRI	4	भूषात्राम्	11	गड्या	18	3,464	25	भारत		
SAT	5	-	12	A control	19	72.50	26			

LIST OF HOLIDA		MAY	CELEBRATION	UF	DAYS
2mrf . Militard-Haudi	dight.	1			
m 1		1			







Speak lodine
Eat lodine
Be of Broin

Adequate intake of radine ensures better growth of brain cells and thus more cells and thus more cell connectivity for greater intellect

Facsimile of BSG Calender 2004



IDD Day Celebrations on 21st October, 2003

At a meeting with the National Commissioner and other professionals on 28th July, 2003, it was decided to have well spread programmes. These would include Training of Scout Masters and Guide Captains, Testing one lakh salt samples by children, a scientific session on 20th October, 2003 and a possible meeting of children with the President of India on the 21st October. At this meeting it was decided that ICCIDD will participate in selected programmes, in all 18, being organized by the Bharat Scouts and Guides from June 2003 to April, 2004 at various parts of the country. These programmes will be held on a partnership basis.

In conclusion, the collaboration between Indian Coalition for Control of Iodine Deficiency Disorders (ICCIDD) and Bharat Scouts and Guides (BSG) is a quotable example of partnership playing key role in the sustainability of a programme of national interest.

From The Hindu, New Delhi Edition dated 21st Oct .2003.

lodine watch

If your child does not perform well in the Board examinations next March, don't always blame it on the poor thing. It could be just that he or she is unable to attain the full potential due to several reasons, not the least of which could be iodine deficiency.

Yes, indeed! Iodine deficiency adversely affects the learning abilities of children causing repeated failures and school dropouts thereby denying them the opportunity to perform well. And in fact, it deprives the country of the fully developed human resource, essential for development and modernization.

About 100 teachers from Delhi schools were recently trained on various aspects of iodine deficiency disorders, including field testing of iodized salt as also orientation for information dissemination on related issues. The thrust was to highlight and create mass awareness on the multiple fallouts arising out of iodine deficiency disorders.

ICCIDD Collaboration with Scouts and Guides of Kenya, Nepal and Thailand

Kenya

In early 2002, Ms. Judith Mutamba, Sub-regional coordinator for Eastern and Southern Africa, met with UNICEF and the leaders of Kenya Scouts Association. An IDD Day took place in the Scouts Training Camp in Nairobi in October 2002 with processions, newspaper messages, speakers, an interactive TV programme and a workshop. ICCIDD sees this collaboration with National Youth Groups as a promising means for promoting elimination of Iodine Deficiency through the use of Iodised salt, and most importantly, sustaining it thereafter.

Nepal Visit by ICCIDD Team 22-26 May, 2003

Report of the Kathmandu, Nepal Visit by ICCIDD Team

Having experienced success in carrying out the programme through civil networking groups alongside public health professionals – which is already strong and sustaining – it was considered to introduce the concept to other countries of the region. Accordingly, ICCIDD discussed the possibilities of collaboration with Nepal Scouts and Guides with the national collaborator, the Bharat Scouts and Guides. The



Director of Bharat Scouts and Guides took the initiative to introduce the team as well as the experience of partnership in the area of IDDE programmes to the Nepal counterparts. At around the same time, interest was noticed from a voluntary group in Nepal.

The ICCIDD team met Mr. R. P. Pandey, International Commissioner and Mr. Valli, National Secretary at the Headquarters at Lainchour, Kathmandu. They were quite keen to know about the ICCIDD and BSG collaboration on such important programme. They were keen to learn more about the problems and preventive measures and how the Scouts and Guides can play lead roles.

Their group keeps coming to India for various programmes of Bharat Scouts and Guides, especially at the training centre at Pachmarhi. Nepal Scouts and Guides are willing to work with ICCIDD. One suggestion from them was that of holding a session during the visits of their team to the Bharat Scouts and Guides headquarters.

Samples of posters and other samples of IEC materials like school time table, name slips and salt testing kit supplied to Bharat Scouts and Guides by the ICCIDD were given to them. They promised to prominently exhibit these at the Headquarters.

Thailand

The 20th World Scout Jamboree 2003 was organized at Bangkok from 27th December 2002 to 7th January 2003. Participants from 154 countries attended the camps. The theme is "Share our world, Share our Cultures: The objectives of the Jamboree was to offer opportunities for young people to grow in all dimensions "physically, intellectually, emotionally, socially and spiritually". One of the modules during the camp was the Global Development Village (GDV), which designed



to offer a day of activities related to global issues facing today's world. One of the themes is "Health". Under health there are five workshops, viz., Feeding the World, Listening to the Harmony Inside, Fighting the Youth Killers, Join a Health Campaign, and Your Body and My Body. There was another module entitled "Community Action Day".

Dr. Sangsom Sinawat, an ICCIDD Director, organized a booth at the 20th World Scout Jamboree in December 2002 in Bangkok, Thailand to introduce the young attendees to IDD and iodised salt.

Coverage of Events in Bharat Scouts & Guides Newsletter

The Bharat Scouts and Guides Newsletter - October 2003,

lodine Deficiency

As a part of the Partnership Programme of Bharat Scouts and Guides with International Council for Control of Iodine Deficiency Disorders (ICCIDD) Training and Re-orientation was conducted at Scout/Guide Unit leaders of Local States of Delhi area on 07/10/2003 at National Headquarters of Bharat Scouts and Guides. About 75 Unit Leaders of Delhi Northern Railway, KVS* and NVS** attended the training. The function was inaugurated by Mr. L. M. Jain, National Commissioner of Bharat Scouts and Guides. Mr. Mohan Dharia, Chief Patron, ICCIDD, former Deputy Chairman Planning Commission, Govt. of India, was the Chief Guest. Dr. S. Sudaresan, Salt Commissioner, Dr. Eric Alain Ategbo from UNICEF, Dr. R. Sankar from M. I., Dr. Chandrakant S. Panday, Prof. M.G. Karmarkar of ICCIDD and Mr. D.L. Sharma. Director, Bharat Scouts and Guides addressed the participants. Training was given by the ICCIDD Team led by Dr. Denish Moorthy, Dr. K. Sukumara, Joint Director, Bharat Scouts and Guides welcomed the guests and participants. The vote of thanks was rendered by Mr. Peter Parekattil of ICCIDD.

The participants were given a practical assignment. The report was submitted on 20/10/2003 at 03:00 pm at National Headquarters.

*Kendriya Vidyalaya Sangathan **Navodaya Vidyalaya Sangathan

The Bharat Scouts & Guides Newsletter, October 2003
One More BSG Fellow:

Prof. Chandrakant S. Pandav, MD, MSc, FNAMS

Prof. C. S. Pandav is a faculty member at the Centre for Community Medicine. All India Institute of Medical Sciences (AIIMS), New Delhi, India. He is a Physician, Medical Scientist, Public Health Specialist, Epidemiologist and Health Economist. Prof. Panday completed both his graduation (MBBS) and post-graduation (MD; Community Medicine) from the All India Institute of Medical Sciences, New Delhi, Prof. Panday has to his credit over 200 publications and presentations in reputed national and international journals and in various conferences. He has also co-edited nine books on health sciences and health economics, published by the Oxford University Press, India. He has also received many national and international awards, the most significant being the Dr. M. K. Sheshadri Prize and the Gold Medal for the year 2000 conferred by the Indian Council of Medical Research (ICMR). Prof. Pandav has been a Sea Scout during his school days.



Prof. C. S. Pandav, of CCM, AllMS at ICCIDD Salt Testing Laboratory

A former Sea Scout's Rumination:

A Personal Perspective

As a pupil at the National Model School, Agha Khan Palace, in Pune City in the Maharashtra State in the early nineteen sixties, I have been a sea scout for many years. (It was while imprisoned at Agha Khan Palace that Mahatma Gandhi gave the call in 1942 for Quit India). In point of fact, "Once a Scout always a Scout," We often had to attend various adventure programmes associated with seas. While at sea during these occasions and later at the beach. I often remember Mahatma Gandhi's final call for freedom by picking up a fistful of humble salt from the beach of Dandi in Gujarat. In a strange process of evolution, the sea (because of its bounty of salt), the Scouts and Guides movement and my vocation have come to a conjoining point - "Being in" for a call to freedom from IDD. Gandhiji called for guit India. For me it is an inspiration for a united call to 'Eliminate IDD forever'. It may be relevant to remember the words of Baden Powell, the founder of Scouts and Guides Movement "A Scout does everything he can to help others, especially children and old people. He does at least one good turn a day". Doing something for children is a commitment. It comes in full measure by helping him or her to attain the optimum physical and mental potential. In case of with International Council for Control of Iodine Deficiency Disorders (ICCIDD), it is by ensuring that they get iodine optimally from womb to tomb.

Prof. Chandrakant S. Pandav

Professor, Centre For Community Medicine,
All India Institute of Medical Sciences, New Delhi and
Secretary, Indian Coalition for Control of Iodine Deficiency
Disorders (ICCIDD)

ICCIDD Regional Newsletter - IQ⁺ Jagriti

The need and advantage of a Regional Newsletter for promoting the cause of sustainable elimination of IDD has been felt for long. In response to this, the ICCIDD Regional Newsletter named "IQ Jagriti" has been started to coincide with the IDD Day-2003. The publication was officially released in Singapore at the ICCIDD Satellite Symposium held during the Annual Conference of Asia-Oceania Thyroid Association in December 2003. The first issue was launched by Dr. John T. Dunn, the Executive Director of ICCIDD.

The Newsletter is intended to fulfill the requirement of a standard regular medium for intercommunication among the various groups and stakeholders contributing towards sustainable elimination of IDD. With special focus on South Asia region, the other objective of the Newsletter is to serve as an instrument of interaction among various professional groups, social sector, members of civil society, the industry and the Government. Further, it aims at informing the consumer groups and people at large.

The Newsletter is for free circulation. Interested organizations and individuals can contact ICCIDD Secretariat or through e-mail at to register for free subscription.

Facsimile of the front cover of IQ+ Jagriti (first Issue)





Fascimile of Time Table and Name Sticker distributed through BSG



आयाञ्चन युक्त नमक प्रातादन। ब्रा = जाप स्त्राभ्य भुगरात तथादन।।

COURTESY: . AMMS . ICCIDO . UNICE

IODISED SALT		lodine Quota Intelligence Quotient
Name		
Class	Section	
Subject		
	नमक प्रतिक्ति। बुद्धि और स्वास्य सुर umption of lodised salt is a hi	

Trishna Brochure - Facsimile





TRISHNA "Thirst for a full life"

lodine Deficiency Disorders (IDD), the single-most important cause of preventable mental retardation Worldwide Trishno' means 'thurst' - the body's urge for a miniscule amount of body's urge for a minimum is 150 potential. Consequence country the fully developed human an essential micronutnent so vital to the physical and mental growth of human beings. The film is produced by renowned film maker, environmentalist and conservationist Ishwar Chandra

It addresses on vanous IDD related problems and the importance of consuming iodised salt as a medium to obtain the daily jodine requirement. If also highlights the plight of cover 1 billion people who are at risk from some form of rodine deficiency disorders in

manifest form of IDD. Other more severe forms of IDD include cretinism, psychomotor incordination stunting, speech and learning defects obortions and still births IDD also causes impaired development of the brain and central rous system in the early feral life in

humans. These changes are irreversible and hamper learning abilities, including ass of upto 13 IQ points. This adversely affects scholastic performance of children which denies them the opportunity of attaining their full potential Consequently, it deprives the resource essential for development an modernization of a country through economic, social, cultural and polinic growth and development

offected areas like the flood prone plains of Budhi Gandhak in Bihar and Utta-Prodesh The film also portrays the success story of the mountain state of the Sikkim, once severely affected by IDD-where the problem is now fully under control due to sustained involvement of people, voluntary organisations lodised salt traders and

Dr Chandrakant S Pandos Additional Professor
Centre for Community Medicine
Room No. 28. Old O.T. Black A LI M S . New Delhi - 110 (Phone/Fax 011-26588522 E-mail cspandov@mantraonline con cpondav@now-india nat in



ISHWAR PANDES

He loved his wad; passionately and was a true professional giving 100% to whate work he undertook - he had a passion for perfection. Ishwar's farte was envir and ethnological films, and he was generous in sharing his vast knowledge with

In a career that spanned nearly 3 decades - Ishwar worked for many apencies including the BBC, Channel 4, Transfel, Doordarshon, several of the UN agence including UNDP, UNEP WHO, WEF IFAD

For the film 'Trishno' Ishwar Pandey recieved recognition from the ICCIDD for his effort in the field of prevention of ladine Deliciency Disorders

A film By

Twenty Four Frames 87 National Media Centre DLF 3 Gurgaon Haryana 122001 Phone 4 91 - 124 6356714

Annexure 1

Letter written to the Director, BSG

27th May 1997

The Director, Bharat Scouts & Guides 16, M.G. Marg, I.P. Estate New Delhi - 110 002

Subject: Collecting information on Iodine Deficiency Disorders at district level

Sir.

We would like to introduce our self as a team from All India Institute of Medical Sciences who have been active in the field of Iodine Deficiency Disorders and its elimination.

Iodine Deficiency Disorders (IDD) are a major public health problem in India. Studies conducted over the last 15 years by the Ministry of Health and Family Welfare, Govt. of India and Centre for Community Medicine, A:I.I.M.S, New Delhi, and other agencies have highlighted the problem of IDD in India. The prevalence of goiter has varied between 13% to 75%.

The single most important cause of mental handicap in the world is iodine deficiency. It has also been proved the world over that children living in areas deficient in iodine have Intelligence Quotient (IQ) scores of up to 13 points less than those of children receiving adequate iodine. This can be very crucial in the formative years of schooling. Iodine deficiency in childhood can lead to mental retardation, delayed motor development, stunted growth, muscular disorders, paralysis, hearing, and speech defects. These disorders interfere with development of the child. And yet, all this is totally preventable.

Globally as well as in India, salt has proved to be the most effective medium of iodine supplementation. Since we universally consume salt in small fixed amounts daily, it is an ideal vehicle to deliver required doses of iodine to the population at large. Also, salt is one of the few commodities consumed by a cross section of people

regardless of their economic status. Since iodine deficiency is due to environmental factors (iodine leached away from soil by glaciations, frequent flooding etc.) iodine supplementation has to continue life long.

Government of India launched the National Goitre Control programme which was renamed as National IDD Control programme in 1992. Under this programme, it is envisaged to supply iodised salt to the whole country. The target was to achieve Universal Iodisation of Salt (USI) in India by 1995 so as to eliminate IDD by the year 2000. Monitoring is a vital part of the effort to eliminate IDD. If the iodine content of salt at the consumer's end is not monitored, then there could be a recurrence of IDD. We seek your cooperation in this endeavor to eliminate IDD.

We are in the process of collecting data on availability and use of iodised salt with the help of NGOs. We request that you recommend two NGOs from your district, one each from a rural and urban area, who will assist us in collecting this information on an ongoing basis. As per your recommendation, we will then contact the specified NGOs. However, a letter from you to NGOs will provide encouragement to them.

Once the information is collected we plan to publish these results as a Citizens' Report. We will be happy to send you a copy of the same. Once again we seek your co-operation in this regard.

Thanking you in anticipation

Yours sincerely,

Dr. K. Anand Asst. Professor, Centre for Community Medicine All India Institute of Medical Sciences New Delhi – 110 029

Mrs. Saroja Narayanan
Project Officer (ICCIDD)
Centre for Community Medicine
All India Institute of Medical Sciences, New Delhi - 110 029

Dr. Chandrakant S. Pandav Additional Professor Centre for Community Medicine All India Institute of Medical Sciences, New Delhi – 110 029

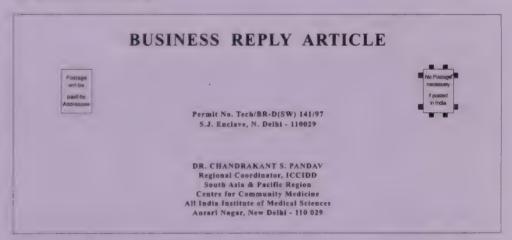


What do we want from you?

- 1. Collect samples of salt from 10 shops in the area where you are working.
- 2. If more than one type of salt, (not brand but in terms of packed /loose or powder / big crystals see Performa for shop) take a sample of each.
- 3. Use the kit provided to test for iodine content of salt..
- 4. Fill the polythene packet and send them to ICCIDD Lab at Delhi in the pre-paid envelop provided.

Pre-paid envelops

The pre-paid envelop is being provided to you so that the samples can be sent to us conveniently. Do not put more than 4 packets of salt per envelop.



How to use the kit?

- 1. Take one tea spoon of salt on a white paper.
- 2. Add a drop of the test solution on it.
- 3. Wait for 30 seconds.
- 4. Read the answer only as Yes / No.
- 5. It is yes, if the colour of the salt turns violet of any shade.

 It is no, if there is no change in colour.

CHECK LIST Pre-paid envelops = 10 Zip lock polythene bag = 40 bags Spot testing kit = 1 Proforma = 10

50 Years of Independence: Month of Mahatma Gandhi's Birthday

Iodine Content of Salt in Retail Shops

Name of NGO :

Name of Village / Town :

Name of Shop :

District :

State :

How long do you keep the salt (Stock)





Mr. Peter Parekattil & Dr.Denish Moorthy (in civvies) of ICCIDD with Director and other senior officials of BSG at Pachmarhi



A view of participants at the training programme

Please Complete this Table-

S. No	S. No Type of Salt	Availability		Label		Price/ Kg	Iodine
	Yes/No	Yes/No	Yes/No	Name	Yes/No Name Iodised or Not (in Rs.)	(in Rs.)	Yes/No
-	Company Packed						
2.	Self Packed						
က်	Loose Salt: Kept in Box/jute bags/ other containers						
4.	Salt kept open on floor						
5.	Salt for animals						

If more than one variety of salt, please mention it.

Thank you for your kind co-operation



State-wise Annual Census of Scouts and Guides of BSG for the Year 2002- 2003

No.	States	Total No. of Scouts	Total No. of Guides	Grand Total
1.	Andaman & Nicobar	2697	2276	4973
2.	Andhra Pradesh	65568	35381	100949
3.	Arunachal Pradesh	6035	5193	11228
4.	Assam	. 7776	3427	11203
5.	Bihar	26143	6921	33064
6.	Central Railway*	. 14245	6030	20275
7.	Chandigarh Union Territory	3337	3213	6550
8.	Chattisgarh*	50000	36333	86333
9.	Daman and Diu	34	66	100
10.	Delhi	12131	8245	20376
11.	Eastern Railway	12982	7254	20236
12.	Goa*	8949	9365	18314
13.	Gujarat	30267	19129	49396
14.	Haryana	228372	132732	361104
15.	Himachal Pradesh	13261	19202	32463
16.	Jammu & Kashmir	6453	3574	10027
17.	Jharkhand	5949	3098	9047
18.	Karnataka	128460	76439	204899
19.	Kendriya Vidyalaya Sangathan	73971	44879	118850
20.	Kerala*	75837	88327	164164
21.	Lakshadweep	0	0	0
22.	Madhya Pradesh	375598	49056	424654
23.	Maharashtra	528570	428304	956874
24.	Manipur*	522	329	851

No.	States	Total No. of	Total No. of	Grand Total
		Scouts	Guides	
25.	Meghalaya	. 2477	4946	7423
26.	Mizoram	835	1281	2116
27.	Nagaland	1313	1401	2714
28.	Navodaya Vidyalaya Sangathan	12701	12279	24980
29.	Northern Eastern Railway	13369	9864	23233
30.	Northern Eastern Frontier Railway	4403	2242	6645
31.	Northern Railway	19735	8958	28693
32.	Orissa	9925	1462	11387
33.	Pondichery	1408	927	2335
34.	Punjab*	89410	42056	131466
35.	Rajasthan	337454	61619	399073
36.	Sikkim	271	310	581
37.	South Central Railway	20076	15011	35087
38.	South Eastern Railway	8273	5072	13345
39.	Southern Railway	5642	3634	9276
40.	Tamil Nadu	104224	46391	150615
41.	Tripura	902	896	1798
42.	Uttar Pradesh	45774	27356	73130
43.	Uttaranchal	11073	3982	15055
44.	West Bengal	15303	10078	25381
45.	Western Railway	9954	4476	14430
46.	Sultanate of Oman	2460	2274	4734
47.	Total	2394169	1255288	3649457

* Note: Census not received till the annual report is prepared.

Hence last year census is incorporated



State-wise detailed report of the samples collected and their iodine content - from BSG

States				tent Vetho		n)		ine C Meth	onter	nt (p	om)
	0	0-7	7-15	15-30	30+	Total	0-7	7-15	15-30	30 +	Total
Andaman & Nicobar	F	_	2	2	20	24	0	2		25	27
Andhra Pradesh	F	1	3	6	5	15	17	1	- 1	8	27
Haryana		-	-	_	-	-	32	16	17	51	116
Karnataka	-		-	-	-	-	3	_	1	2	6
Madhya Pradesh	1	2	8	5	20	36	9	14	7	30	60
Maharashtra	-	-	-	-	-	-	14	5	18	19	56
West Bengal	-	-	3	4	2	9	40	18	68	14	140
Bihar	-	-	-	-	-	-	40	13	17	14	84
Orissa	-	-	-	-	-	-	5	8	7	5	25
Chandigarh	-		-	-	-	-	6	5	2	8	21
TOTAL	1	3	16	17	47	84	166	82	138	176	562

State-wise detailed report of the samples collected and their iodine content - from NGOs

States				tent Metho		n)		ine C Meth	onter nod	nt (pi	pm)
	0	0-7	7-15	15-30	30+	Total	0-7	7-15	15-30	30 +	Total
Assam	1	19	72	43	32	167	51	150	106	187	494
Andhra Pradesh	-	-	_			_	16	9	14	15	54
Bihar	-		-	-	-	_	1	13	11	8	33
Delhi	11	19	44	45	38	157	8	25	29	95	157
Goa	1	1	-	1	4	7	7	5	_	3	15
Haryana	3	1	3	4	5	16	12	3	3	43	61
Himachal Pradesh	2	1	4	39	2	48	12	10	8	18	48
Karnataka	-	-	-	-	_	-	13	17	3	-	33
Madhya Pradesh	-	-	-	-	-		3	8	9	31	51
Maharashtra	7	1	11	1	11	31	30	6	1	31	68
Meghalaya	-	6	4	4	3	17	5	2	3	7	17
Orissa	10	4	1	6	18	39	4	10	6	16	36
Punjab	-	-	-	-	-	-	10	6	6	18	40
Sikkim	-	-	_	3	1	4	5	5	9	17	36
Tamil Nadu	2	18	7	4	8	39	22	2	4	11	39
Tripura	-	4	5	-	21	30	1	8	5	16	30
Uttar Pradesh	36	7	16	41	103	203	41	11	19	154	225
West Bengal	-	1	2	3	1	7	17	12	7	24	60
Andaman & Nicobar	-	-	4	7	4	15	1	1	6	13	21
Chandigarh	1	-	-	6	4	11	1	5	5	10	21
TOTAL	74	82	173	207	255	791	260	308	254	717	1539



Samples Tested with ICCIDD Salt Testing Kit in October 2003

°N	No Name of School	Area	No. of S tudents Total No. Sample	Total No.	Sample	Sample
			O 4		Yes	No
-	Azad Rover Scout Group	West Vinod Nagar	. 560	5287	4838	449
2.	Govt. Boys S. Sec. School	Jafrabad	198	1980	1474	506
6	Swarn Jayanti Scout Group	Gangotri Vihar	116	942	765	177
4	Govt. Boys S. Sec. School	Gokul Pur	184	1840	1513	327
5.	D. A. V. Sr. Sec. School	Shankar Nagar	172	3367	2529	838
9	Amity International School	Saket	102	096	519	441
7.	ASN Sr. Sec. School	Mayur Vihar	22	80	70	10
00	Govt. Boys S. Sec. School	Mangolpuri	72	720	571	149
6	Govt. Boys S. Sec. School	Geeta Colony	192	1920	1808	112
10.	S.S.Foundation School	Morna, Noida	174	629	553	126
=	Sant Nirankari Boys S.S. School Sant Nirankari Colony	Sant Nirankari Colony	202	2020	1762	258
12.	Govt. Girls Sr. Sec. School	Srinivaspuri	200	1842	1358	484
13.	Little Flowers Public Sr. Sec. School	Shivaji Park	143	2854	2788	99

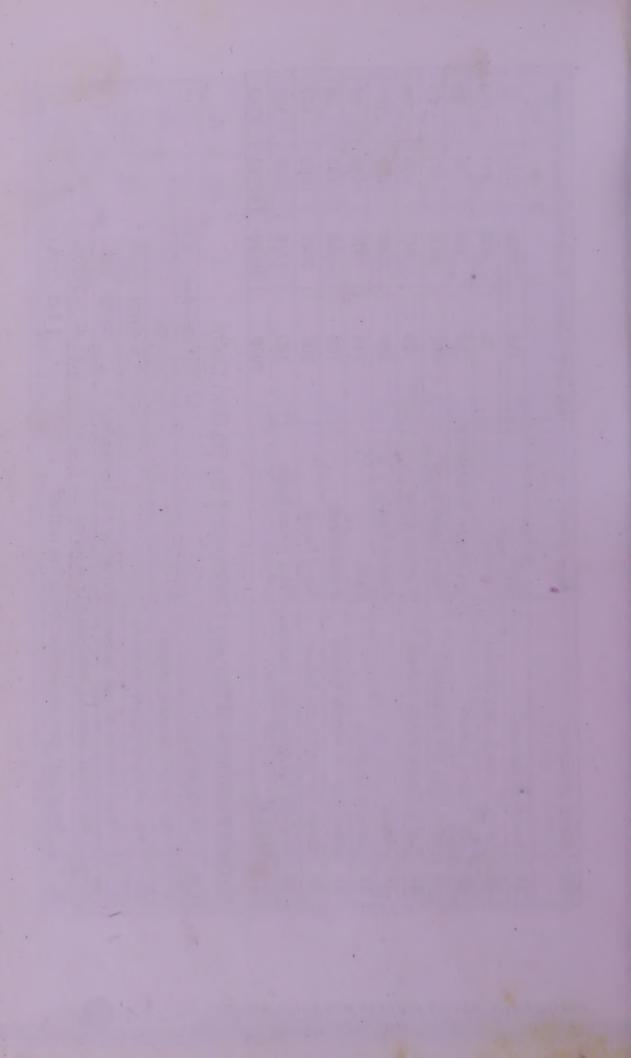
No No	Name of School	Area	No. of S tudents Total No. Sample 'Yes'	Total No.	Sample 'Yes'	Sample 'No'
4.	Harcourt Butler Senior Secondary School	Mandir Marg, New Delhi	09	009	571	29
15.	L.H.S. Sarvodaya Vidyalaya	Gokhale Marg, Mori Gate Delhi-6	174	1723	1333	390
16.	Vipin Chandrapal Sarvodaya Kanya Vidyalaya	Babarpur, Shadara	402	4020	4020	0
17.	Bharat Scouts & Guides	Bharat Nagar, Ghaziabad	38	177	135	42
18.	Govt. Boys Sr Sec School	Andrews Ganj	172	1720	1603	117
19.	Rana Pratap Sarvodaya Kanya Vidyalaya	Rithala, Delhi – 85	160	1600	1560	40
20.	Rajkiya Varisht Madhyamik Bal Vidyalaya, No. 2	Narela, Delhi	186	1859	1538	321
21.	Pragati Public School	Chander Nagar	30	280	280	0
22.	N.P. Primary School	Ashoka Hotel	196	266	236	30
23.	Govt. Boys Sr Sec School	New Kondli, Delhi -96	378	3765	2991	774
24.	JMSV Sec 12	RK Puram	188	989	518	168
25.	NP Co-ed. Sec School	Lodi Estate, New Delhi	200	1055	606	146
26.	Jose Matri Sarvodaya Vidyalaya, Sec 12	RK Puram	166	215	200	15



°Z	No Name of School	Area	No. of S tudents Total No. Sample Sample	Total No.	Sample 'Yes'	Sample 'No'
27.	Northern Railway	Delhi	198	1980	1913	67
28.	Govt Co-Ed Sr Sec School	Rithala	70	069	477	213
29.	Jain Happy School	Sri Bhagat Singh Marg	88	763	740	23
30.	Govt Boys Bal Vidyalaya	West Vinod Nagar	100	1000	977	23
31.	Little Flower Public School	Yamuna Vihar	150	299	479	188
32.	RSKV	Kalyan Puri	200	2000	1809	191
33.	Scouts Group	Delhi	114	1075	1033	42
34.	Govt. Co-ed. Middle School	Nand Nagari	100	869	663	35
35.	Govt. Co-ed. Middle School	Nand Nagari	202	2020	1583	437
36.	Rajkiya Sarvodaya Bal Vidyalaya West Vinod Nagar	West Vinod Nagar	180	1746	1637	109
	TOTAL		6809	55096	47753	7343

Salient Features of Survey Conducted By BSG in Delhi

Number	36	680'9	55,096 (100%)	47,753 (87%)	7,343 (13%)
Particulars	No of participating schools	No of participating students	Total number of salt samples tested (by salt testing kit)	No of salt samples with Iodine (Yes Iodine)	No of salt samples without Iodine (No Iodine)
S.No.	-	2.	69	4.	5.





"I would be hard-hearted enough
to let the sick die
if you can tell me
how to prevent others from falling sick"

Mahatma Gandhi



Sustaining Elimination of IDD

